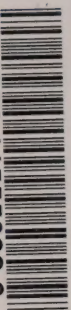


3 1761 1155038 6

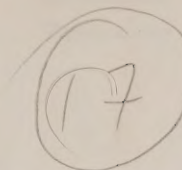




Digitized by the Internet Archive
in 2022 with funding from
University of Toronto

<https://archive.org/details/31761115550386>

CAI
EP150
-1990
N72
v.2



NUCLEAR FUEL WASTE DATABASE

Volume 2

Federal Environmental Assessment Review Office
Hull, Quebec

October 19, 1990

NUCLEAR FUEL WASTE DATABASE - SUBJECT CLASSIFICATION

10 DISPOSAL AND STORAGE
ALTERNATIVES

- 11 Geologic Disposal
(repository design)
- 12 Marine Disposal
- 13 Other
Alternatives

30 SOCIO-ECONOMIC AND
ECOLOGICAL IMPACTS

- 31 Social Impacts
- 32 Economics
- 33 Health
- 34 Public
Participation
- 35 Ethics
- 36 Ecological Impacts

20 WASTE MANAGEMENT

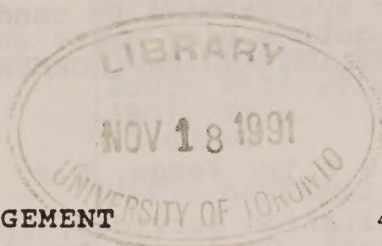
- 21 Policy and
Administration
- 22 Siting
- 23 Waste
Characterization
- 24 Transport
- 25 Waste Handling
and Emplacement
- 26 Containment
(design testing,
corrosion)
- 27 Volume Reduction
(reprocessing)

40 EARTH SCIENCE

- 41 Chemistry
- 42 Geology
- 43 Radionuclide
Migration
- 44 Thermodynamics

50 ANALYTICAL TECHNIQUES

- 51 Risk Analysis
- 52 Safety Analysis
- 53 Monitoring
- 54 Modelling



AUTHOR	Sculley, L.W., et al.
TYPE	acad
ORGANIZATION	
TITLE	A COMPARATIVE STUDY OF RADIOACTIVE WASTE EMPLACEMENT CONFIGURATIONS. WASTE MANAGEMENT '84.
PUBLISH	Proceedings of the Symposium on Waste Management, Vol 11-15, 1984. p. 337-343.
DATE	84/03/00
ABSTRACT	
KEYWORDS	WASTE HANDLING AND EMPLACEMENT:
LOCATION	
REFERENCE	

AUTHOR	Thunborg, S.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	A ROBOTIC RADIATION SURVEY AND ANALYSIS SYSTEM.
PUBLISH	1987. 7p.
DATE	87/00/00
ABSTRACT	A robotic system used to conduct radiation surveys of prototypical nuclear waste shipping cask is presented.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: containment.
LOCATION	
REFERENCE	

AUTHOR	Wallace, K.G.jr; Zerga, D.P.
TYPE	
ORGANIZATION	Mine Ventilation Services, Inc., Lafayette, CA; Pars Brinckerhoff, Quade and Douglas, Inc., San Francisco
TITLE	AN ANALYSIS OF AIR COOLING PRIOR TO RE-ENTERING A DRIFT CONTAINING EMPLACED COMMERCIAL NUCLEAR WASTE.
PUBLISH	January 1988. 29 p.
DATE	88/01/00
ABSTRACT	This paper describes an analysis performed to determine cool-down time of drifts in the prospective commercial waste repository in volcanic tuff.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: thermodynamics.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad/media
ORGANIZATION	
TITLE	CHALLENGES OF WASTE HANDLING AND DISPOSAL.
PUBLISH	April 1986. Radioactive Waste Management & the Nuclear Cycle. V. 7(2) p. 107.
DATE	86/04/00
ABSTRACT	
KEYWORDS	WASTE HANDLING AND EMPLACEMENT:
LOCATION	
REFERENCE	

AUTHOR	Broc, D.
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	CHARACTERIZATION OF CANDIDATE BUFFER MATERIALS. VOL.

PUBLISH	THERMO-MECHANICAL CALCULATION OF BUFFER IN GRANITIC
DATE	1987. 150 p.
ABSTRACT	87/00/00
	Mechanical stresses of compacted clays between the c
	the host rock are studied in the different cases dur
	evolution of a vitrified waste storage site.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: buffers, granite.
LOCATION	
REFERENCE	
AUTHOR	Fisk, A.T., et al.
TYPE	priv
ORGANIZATION	Foster-Miller Inc., MA (USA).
TITLE	CONCEPTUAL ENGINEERING STUDIES AND DESIGN FOR THREE
	MACHINES FOR NUCLEAR WASTE TRANSPORTING, EMPLACEMENT
	RETRIEVAL.
PUBLISH	1985. 106 p.
DATE	85/00/00
ABSTRACT	
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: engineering, design.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	CONDITIONING AND HANDLING OF TRITIATED WASTES AT CAN
	POWER FACILITIES.
PUBLISH	1987. 11 p.
DATE	87/00/00
ABSTRACT	
KEYWORDS	WASTE HANDLING AND EMPLACEMENT:
LOCATION	
REFERENCE	
AUTHOR	Stinebaugh, R.E.; Robb, R.M.
TYPE	priv/govt
ORGANIZATION	Sandia National Labs. NM; Los Alamos Technical Assoc
	NM (USA).
TITLE	COST COMPARISON OF HORIZONTAL AND VERTICAL WASTE EMP
	METHODS FOR A REPOSITORY IN TUFF.
PUBLISH	May 1987. 48 p.
DATE	87/05/00
ABSTRACT	This document shows that 1) there are important cost
	resulting from the use of the horizontal emplacement
	2) these cost advantages exist for horizontal hole 1
	short as 100 ft.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: tuff, geology.
LOCATION	
REFERENCE	
AUTHOR	Denault, P.; Pabrita, L
TYPE	acad
ORGANIZATION	
TITLE	GENTILLY 1 NEARS 'STATIC STATE'.
PUBLISH	Nuclear Engineering International. August 1985. p. 3
DATE	85/08/00
ABSTRACT	Gentilly 1, the commercial-scale prototype Candu-BLW
	only provide experience in decommissioning, but will
	an important facility for demonstrating full scale a
	handling techniques.

KEYWORDS
LOCATION
REFERENCE

WASTE HANDLING AND EMPLACEMENT:

NFW 2.2-25-1

AUTHOR

Saire, D.E. (International Atomic Energy Agency, Vienna, Austria).

TYPE

assoc

ORGANIZATION

International Atomic Energy Agency. Vienna (Austria)

TITLE

IAEA PROGRAM FOR HANDLING, PROCESSING AND STORAGE OF

PUBLISH

P. 27-35. Spent Fuel Management: Current Status and the IAEA Programme. Proceedings of an Advisory Group Spent Fuel Management held in Vienna, 11-13 March 1987. 170 p.

DATE

87/05/00

ABSTRACT

This paper on the IAEA's Program on the handling, transport, conditioning and storage of radioactive wastes provides an overview of current and planned activities by the Agency in this field.

KEYWORDS

WASTE HANDLING AND EMPLACEMENT:

LOCATION

REFERENCE

AUTHOR

Hoskins, R.E.

TYPE

ORGANIZATION

TITLE

INTEGRATED CASK STORAGE SYSTEMS FOR STORAGE, TRANSPORT AND DISPOSAL OF SPENT NUCLEAR FUEL (WASTE POLICIES AND PROCEDURES FOR HIGH-LEVEL WASTE).

PUBLISH

Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 169-176.

DATE

84/03/00

ABSTRACT

An integrated systems approach was devised by TVA for the back-end of the nuclear fuel cycle. The approach includes on-site storage, transportation, offsite storage and a geologic repository.

KEYWORDS

WASTE HANDLING AND EMPLACEMENT: cask.

LOCATION

REFERENCE

AUTHOR

Lupien, M.; Rheaume, M.; Marios, H.

TYPE

assoc

ORGANIZATION

TITLE

LIGNE DE CONDUITE POUR L'EXPLOITATION DES INSTALLATIONS DE STOCKAGE DES DECHETS RADIOACTIFS SOLIDES A GENTILLY

PUBLISH

Rapport presente a la Commission de Controle de l'energie atomique en appui au permis d'exploitation de l'aire de stockage des dechets radioactifs. Mai, 1986. 18 p.

DATE

86/05/00

ABSTRACT

The Gentilly process of decommissioning radioactive waste is described along with the guidelines for its installation and use.

KEYWORDS

WASTE HANDLING AND EMPLACEMENT: reprocessing.

LOCATION

REFERENCE

NFW 2.2-25-2

AUTHOR

Sappok, M.

TYPE

priv

ORGANIZATION

TITLE

METHOD OF AND APPARATUS FOR THE INTRODUCTION OF RADIOACTIVE METALLIC WASTES INTO A MELTING FURNACE.

PUBLISH

24 Nov 1987. VP.

DATE	87/11/24
ABSTRACT	A radioactive metallic waste disposal apparatus is d comprising: a transport vessel containing therein ra metallic waste; a melting furnace; a furnace chargin more.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT:
LOCATION	
REFERENCE	
AUTHOR	Mallory, C.W.; Watts, R.E.; Paladino, J.B.; Razor, J A.W.; Winston, S.J.; Stricklin, B.C.
TYPE	priv
ORGANIZATION	US Commissioner of Patents, Washington, DC (USA).
TITLE	NUCLEAR WASTE PACKAGING FACILITY.
PUBLISH	21 July 1987. VP.
DATE	87/07/21
ABSTRACT	A nuclear waste packaging facility comprising; a fir substantially surrounded by radiation shielding, inc for remote handling; a second section substantially by radiation shielding, including means for handling deformable container bearing waste delivered to the section; and, a third section, a module transportati loading section between the first and second section a means for handling empty modules delivered to the
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: design.
LOCATION	
REFERENCE	
AUTHOR	Burkholder, H.C.; Brouns, R.A. (comps.); Powell, J.A
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	NUCLEAR WASTE TREATMENT PROGRAM: ANNUAL REPORT FOR F
PUBLISH	September 1987. 223 p.
DATE	87/09/00
ABSTRACT	To support DOE's attainment of it's goals, nuclear w treatment program is to provide technology necessary design and operation of nuclear waste treatment fac commercial enterprises as part of a licensed waste m system and problem specific treatment approaches, wa treatment process adaptations, equipment designs, an shooting.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: design, licensing, w
LOCATION	
REFERENCE	
AUTHOR	Dennis, A.W.;
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	OPERATIONAL PROCEDURES FOR RECEIVING, PACKAGING, EMP RETRIEVING HIGH-LEVEL AND TRANSURANIC WASTE IN A GEO REPOSITORY IN TUFF (WASTE POLICIES AND PROGRAMS, HIG WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 279-285.
DATE	84/03/00
ABSTRACT	The annual waste receipts now being used as the basi conceptual design of the surface waste receiving fac discussed. Waste packaging systems are under develop two waste emplacement methods are currently being re
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: containment.

LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Bechtold, W.; Closs, K.D.; Papp, R. assoc Canadian Nuclear Society. (Canada). PARAMETERS AND CRITERIA INFLUENCING THE SELECTION OF EMPLACEMENT CONFIGURATIONS IN MINED GEOLOGIC REPOSIT Canadian Nuclear Society 2nd International Conferenc Radioactive Waste Management. Sept. 7-11, 1986. p. 6 86/09/00 WASTE HANDLING AND EMPLACEMENT: geologic disposal.
AUTHOR TYPE ORGANIZATION TITLE	Kring, C.T.; Herndon, J.N.; Meacham, S.A. govt Oak Ridge National Lab. TN (USA). POTENTIAL APPLICATIONS OF ADVANCED REMOTE HANDLING A MAINTENANCE TECHNOLOGY TO FUTURE WASTE HANDLING FACI
PUBLISH DATE ABSTRACT	1987. 20 p. 87/00/00 These developments address the nonrepetitive nature maintenance in the unstructured environments encount waste handling facility.
KEYWORDS LOCATION REFERENCE	WASTE HANDLING AND EMPLACEMENT:
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Warnecke, E.; Brennecke, P. govt Physikalisch-Technische Bundesanstalt. (FRG). PRELIMINARY WASTE ACCEPTANCE REQUIREMENTS FOR THE PL REPOSITORY. Kerntechnik. Sep. 1987. V. 51(2) p. 87-90. 87/09/00 The Physickalisch-Techische Bundesanstalt has establ preliminary waste acceptance requirements for the pl Repository. The development of these requirements is
KEYWORDS LOCATION REFERENCE	WASTE HANDLING AND EMPLACEMENT: regulations.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Odoj, R.; Warnecke, E.; Martens, B.R. govt Kernforschungsanlage Juelich G.M.B.H. (FRG). QUALITY CONTROL PRIOR TO DISPOSAL IN THE KONRAD REPO Kerntechnik. Sep. 1987. V. 51(2) p. 104-107. 87/09/00 Radioactive waste packages to be disposed of must me acceptance requirements of the repository. The wast are responsible for the waste package quality. The p sampling system for quality control employed at Physikalisch-Technische Bundesanstalt is presented a facilites described.
KEYWORDS LOCATION REFERENCE	WASTE HANDLING AND EMPLACEMENT: monitoring.
AUTHOR	Rush, Peter.

TYPE	priv
ORGANIZATION	
TITLE	RADIATING CONFIDENCE: PT . 1.
PUBLISH	Occup. Saf. Health. , March 1988. V. 18(3). P. 30-32
DATE	88/03/00
ABSTRACT	The paper concerns the remote handling and monitoring available for use in the management, transport and storage of radioactive waste in metal drums.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: transport.
LOCATION	
REFERENCE	

AUTHOR	Hambley, D.F.; Russell, J.E.; Whitfield, R.G. (and others)
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	RADIOACTIVE WASTE ISOLATION IN SALT: PEER REVIEW OF TECHNOLOGY, INC., REPORT AND POSITION PAPER CONCERNING EMPLACEMENT MODE AND ITS EFFECT ON REPOSITORY CONCEPT
PUBLISH	Feb 1987. 120 p.
DATE	87/02/00
ABSTRACT	Recommendations for revising the Fluor technology.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: salt.
LOCATION	
REFERENCE	

AUTHOR	Kobran, M.J.; Jeffrey, J.D. (Public Service Electric and Power Co., Hancocks Bridge, NJ).
TYPE	
ORGANIZATION	
TITLE	RADIOACTIVE WASTE PROCESSING AT HOPE CREEK NUCLEAR GENERATING STATION BY THE RAPID DEWATERING METHOD.
PUBLISH	P. 687-688. Waste Management '87: Waste Isolation in Technical Programs and Public Education. Tucson, AZ. of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	An evaluation of Hope Creek Nuclear Generating Station processing, packaging, and handling capabilities with process equipment was conducted.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT:
LOCATION	
REFERENCE	

AUTHOR	
TYPE	
ORGANIZATION	
TITLE	RADWASTE FILTER PERFORMANCE IMPROVEMENT.
PUBLISH	EPRI Journal. March 1988. V. 13(2) p. 42-45.
DATE	88/03/00
ABSTRACT	
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: engineering.
LOCATION	
REFERENCE	

AUTHOR	Goehring, R.; Wehmeyer, J.
TYPE	govt
ORGANIZATION	Deutsche Gesellschaft zum Bau und Betrieb von Endlagern für Abfallstoffe M.B.H. (FRG).
TITLE	RECEIVING OF WASTE PACKAGES AND EMPLACEMENT MONITORING AT THE PLANNED KONRAD REPOSITORY.
PUBLISH	Kerntechnik. Sep. 1987. V. 51(2) p. 113-116.
DATE	87/09/00

ABSTRACT

Over an estimated forty years of operation, some 650 waste packages of low heat generation are planned for the Konrad underground repository. The procedure of

KEYWORDS
LOCATION
REFERENCE

the waste packages is described complete with the re delivery steps and information about the check, clear documentation procedures.

WASTE HANDLING AND EMPLACEMENT:

AUTHOR
TYPE
ORGANIZATION

Leister, P.; Mischke, J.

TITLE

Deutsche Gesellschaft fuer Wiederaufarbeitung von Kernbrennstoffen M.B.H., Hannover, Germany, (F.R.). REMOTE LIQUID AND SOLID WASTE HANDLING; DIFFERENT MA PHILOSOPHIES AND EQUIPMENT FOR THE REPROCESSING PLANT WACKERSDORF.

PUBLISH
DATE
ABSTRACT

1987. 13 p.

87/00/00

It is reported about the arrangement of the process for liquid and solid waste treatment in the way in n accessible cells of different layout and maintenance WASTE HANDLING AND EMPLACEMENT: reprocessing.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Gustafsson, B. (Swedish Nuclear Fuel and Waste Manage Stockholm)

PUBLISH
DATE
ABSTRACT

REMOTE-HANDLING EXPERIENCE IN SWEDEN'S CLAB INTERMED FACILITY FOR SPENT FUEL.

Nucl. Eur. August-September 1987. V.7(8-9) P.29.

87/08-09/00

The intermediate spent fuel storage facility, CLAB, into active operation in July 1985. It has been equi so-called conditioning hot cell to carry out remote on different mechanical equipment from the installat WASTE HANDLING AND EMPLACEMENT:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Glowka, D.A.

govt

Sandia National Lab. NM (USA).

REPOSITORY WASTE HANDLING EQUIPMENT DEVELOPMENT PLAN NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT. (NNWSI

November 1987. 96 p.

87/11/00

This report presents a plan for developing equipment emplacing and, if necessary, retrieving high-level n at the proposed Yucca Mountain repository in Nevada. is structured to provide critical information needed effects of the selection on subsequent equipment dev demonstration costs are estimated.

PUBLISH
DATE
ABSTRACT

KEYWORDS	WASTE HANDLING AND EMPLACEMENT:
LOCATION	
REFERENCE	
AUTHOR	Nair, B.R.; Bahorich, R.J. (Westinghouse Electric Co
	Waste Dept., Madison, PA)
TYPE	Post, R.G. (ed.)
ORGANIZATION	priv
TITLE	RETRIEVABILITY CONSIDERATIONS AND THEIR IMPACT ON TH
	VERTICAL EMPLACEMENT AND RETRIEVAL EQUIPMENT FOR A R
	SALT.
PUBLISH	P. 261-270. Waste Management '87: Waste Isolation in
	Technical Programs, and Public Education. Tucson, AZ
	of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	The current design concept for the disposal of nucle
	waste packages in a repository in salt is based on t
	emplacement of individual packages in vertical boreh
	underground mine floor.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: salt.
LOCATION	
REFERENCE	
AUTHOR	Wildt, K.H.
TYPE	
ORGANIZATION	Deutsche Gesellschaft Zum Bau und Berieb von Endlage
	Abfallstoffe M.B.H., Peine, Germany, (F.R.).
TITLE	SELECTION OF A BACKFILLING METHOD FOR ROADWAY STORAG
	SPENT FUEL CASKS. (in German)
PUBLISH	October 1987. 42 p.
DATE	87/10/00
ABSTRACT	For the backfilling of cavities in the roadways of a
	shaft for ultimate disposal of pollux spent fuel cas
	methods suitable for this purpose are pneumatic back
	slinger stowing.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: backfill, cask.
LOCATION	
REFERENCE	
AUTHOR	Connors, B.J.; Golden, M.P.; Valenti, P.J.; Winkel,
TYPE	priv
ORGANIZATION	West Valley Nuclear Services Co. Inc. NY (USA).
TITLE	SPENT NUCLEAR FUEL REMOVAL PROGRAM AT THE WEST VALLE
	DEMONSTRATION PROJECT: TOPICAL REPORT.
PUBLISH	March 1987. 81 p.
DATE	87/03/00
ABSTRACT	The spent nuclear fuel removal program at the West V
	demonstration project consisted of removing the spen
	fuel assemblies from the storage pool in the plant,
	them in shielded casks for transportation.
KEYWORDS	WASTE HANDLING AND EMPLACEMENT: transport.
LOCATION	
REFERENCE	
AUTHOR	Halverson, T.W.;
TYPE	priv

ORGANIZATION TITLE	Westinghouse Electric Corp. NM (USA).
PUBLISH	THE ADDED LEVEL OF QUALITY ASSURANCE PROVIDED BY THE CONTACT-HANDLED AND REMOTE-HANDLED WASTE DEMONSTRATI Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 305-310.
DATE ABSTRACT	87/00/00 This paper discusses the contact-handled and remote- waste emplacement and retrieval demonstrations which conducted at the WIPP. The retrieval demonstrations performed as a requirement that was established by t consultation and cooperation agreement between the s Mexico and the DOE.
KEYWORDS LOCATION REFERENCE	WASTE HANDLING AND EMPLACEMENT: regulations.
AUTHOR TYPE ORGANIZATION TITLE	Tsui, K.K.; Tsai, A. govt Atomic Energy of Canada Limited. THERMAL ANALYSES FOR DIFFERENT OPTIONS OF NUCLEAR FU EMPLACEMENT.
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	AECL - 7823. 85/00/00 WASTE HANDLING AND EMPLACEMENT: thermodynamics.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Berger, J.D.; Gneiting, B.C.; Sanders, T.L. priv Hanford Engineering Development Lab. WA (USA). USE OF ROBOTICS FOR RADIOACTIVE WASTE SHIPPING AND R 86/00/00 WASTE HANDLING AND EMPLACEMENT:
AUTHOR TYPE ORGANIZATION TITLE PUBLISH	Chiquelin, W.R.; Halverson, T.W. priv Westinghouse Electric Corp. NM (USA). WIPP WASTE HANDLING PROCESSES AND EQUIPMENT. Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 627-630.
DATE ABSTRACT	87/00/00 The start clean, stay clean, operating philosophy of resulted in a total quality waste handling environme article describes the waste emplacement and retrieva that will be validated prior to the October 1988 rec waste.
KEYWORDS LOCATION REFERENCE	WASTE HANDLING AND EMPLACEMENT:

AUTHOR	Philipose, K.E.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	500 YEAR CONCRETE FOR A RADIOACTIVE WASTE REPOSITORY
PUBLISH	Presented at Waste Management '88 Conference, Tucson Feb. 28 - Mar. 3 1988.
DATE	88/03/00
ABSTRACT	
KEYWORDS	CONTAINMENT: concrete.
LOCATION	
REFERENCE	
AUTHOR	Hallberg, R.O.; Oestlund, P.; Wadsten, T. (Stockholm Sweden); Come, B. (CEC); Chapman, N.A. (BGS).
TYPE	acad
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	A 17TH CENTURY BRONZE CANNON AS ANALOGUE FOR RADIOAC DISPOSAL.
PUBLISH	P. 135-139. Natural Analogues in Radioactive Waste D Proceedings of a symposium organized by the CEC and Brussels. Graham & Trotman, 1987. 506 p. Radioactive Management Series.
DATE	87/04/00
ABSTRACT	The present method of fuel disposal is based on keep in copper canisters embedded in clay. By means of th calculations it has been concluded that the corrosio copper is very small. These conclusions are further getting access to copper objects exposed to corrosiv for a long period of time.
KEYWORDS	CONTAINMENT: clay, copper.
LOCATION	
REFERENCE	
AUTHOR	Rowan, S.M.; Donaldson, L.; White, S. (Trent Polytec Nottingham, UK)
TYPE	acad
ORGANIZATION	United Kingdom Nirex, Ltd.; UKAEA Harwell Lab. Chemi
TITLE	A COMPARATIVE STUDY OF THE PORE STRUCTURES AND SURFA HARDENED CEMENT PASTES OF POTENTIAL USE IN RADIOACTI REPOSITORIES.
PUBLISH	February 1988. 12 p.
DATE	88/02/00
ABSTRACT	Measurements of water vapour adsorption at 200c and intrusion have been used to compare the surfaces and structures of hardened cement pastes made from ordin cement and the additives blast furnace slag and pulv ash results suggest that each additive, after taking hydration reaction with OPC, produces a paste whose structure is similar to that derived from OPC alone.
KEYWORDS	CONTAINMENT: cement.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	British Nuclear Energy Society. (UK).

TITLE	A MATHEMATICAL MODEL OF LOCALIZED CORROSION OF STEEL WASTE CANISTERS.
PUBLISH	British Nuclear Energy Society Journal. Aug. 86. V.
DATE	86/08/00
ABSTRACT	
KEYWORDS	CONTAINMENT: corrosion, modelling.
LOCATION	
REFERENCE	
AUTHOR	Feng, X.; Barkatt, A.
TYPE	acad
ORGANIZATION	The Catholic University of America. (USA).
TITLE	A MODIFIED THERMODYNAMIC MODEL OF GLASS DISSOLUTION INTERACTIVE CONDITIONS.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un
DATE	Arizona Nuclear Engineering Dept. 1987. p. 584-590.
ABSTRACT	87/00/00 An extensive series of leach tests were carried out glasses, in particular borosilicate glasses develop West Valley HLW Immobilization Project. The results discussed.
KEYWORDS	CONTAINMENT: waste management, glass, leaching.
LOCATION	
REFERENCE	
AUTHOR	Bucholz, J.A. (Oak Ridge National Lab., TN).
TYPE	govt
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	A PERSONAL COMPUTER PROGRAM FOR EVALUATING THE IMPAC CASK DESIGN SPECIFICATIONS.
PUBLISH	V.2 P.561-562. Packaging and Transportation of Radio Materials (PATRAM '86). Proceedings of an Internatio Symposium on the Packaging and Transportation of Rad Materials held in Davos, 16-20 June 1986. Vienna. IA 780 p. Proceedings series.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: transport, safety analysis, modelling,
LOCATION	
REFERENCE	
AUTHOR	Hayward, P.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	A REVIEW OF GLASS-CERAMICS FOR THE IMMOBILIZATION OF RECYCLE WASTES.
PUBLISH	1987. 78 p.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass, ceramics.
LOCATION	
REFERENCE	
AUTHOR	Cartwright, K.; Larson, T.H.; Herzog, B.L.; Jonson, Albrecht, K.A.; Moffett, D.L.; Keefer, D.A.; Stohr,
TYPE	govt
ORGANIZATION	Illinois State Geological Survey, Champaign; Nuclear Commission, Washington, DC. Div. of Waste Management
TITLE	A STUDY OF TRENCH COVERS TO MINIMIZE INFILTRATION AT DISPOSAL SITES: FINAL REPORT. (GLACIAL TILL, LOESS,

PUBLISH DATE ABSTRACT	GRAVEL). February 1987. 137 p. 87/02/00 We have investigated methods to limit infiltration t covers by reviewing current practices, testing selec materials, simulating selected cover designs, and de constucting, and monitoring four field-scale experim covers.
KEYWORDS LOCATION REFERENCE	CONTAINMENT: monitoring.
AUTHOR TYPE ORGANIZATION TITLE	King, F. govt Atomic Energy of Canada Limited. A TECHNIQUE TO INVESTIGATE THE MECHANISM OF UNIFORM THE PRESENCE OF A SEMI-PERMEABLE MEMBRANE.
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	1987. 38 p. 87/00/00 CONTAINMENT: corrosion.
AUTHOR TYPE ORGANIZATION TITLE	govt A WASTE PACKAGE PERFORMANCE ASSESSMENT CODE WITH AUT SENSITIVITY-CALCULATION CAPABILITY.
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	ORNL Reprot TM-9976, Sept. 1986. 39 p. 86/09/00 CONTAINMENT: modelling.
AUTHOR TYPE	Onofrei, M.; Mathew, P.M.; McKay, P.; Hosaluk, L.J.; D.W. govt
ORGANIZATION TITLE	Atomic Energy of Canada Limited. ADVANCED CONTAINMENT RESEARCH FOR THE CANADIAN NUCLE MANAGEMENT PROGRAM.
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	1986. 28 p. 86/00/00 CONTAINMENT:
AUTHOR TYPE ORGANIZATION TITLE	Vance, E.R.; Hayward, P.J.; Tait, J.C.; George, I.M. A.A. govt Atomic Energy of Canada Limited. ALTERNATIVE PREPARATIVE METHODS FOR SPHENE GLASS-CER
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	4 p. (1986). Reprinted from the Ceramic Bulletin (Oc 65(10):1423-1426. 86/10/00 CONTAINMENT: glass.

AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Marsh, G.P.; Taylor, K.J. govt The Swedish Nuclear Fuel and Waste Management Co., (AN APPROACH FOR EVALUATING THE GENERAL AND LOCALIZED CARBON STEEL CONTAINERS FOR NUCLEAR WASTE DISPOSAL. June 1987. 14 p. 87/06/00 The paper considers the long term corrosion of carbo containers for heat generating nuclear waste in a gr repository. CONTAINMENT: corrosion, geologic disposal.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Marsh, G.P.; Taylor, K.J. (UKAEA Harwell Lab. Materi Development Div.) assoc AN ASSESSMENT OF CARBON STEEL CONTAINERS FOR RADIOAC DISPOSAL. Corros. Sci. 1988. V.28(3) P.289-320. 88/00/00 The report describes a study of the corrosion of hi nuclear waste containers in geological disposal. CONTAINMENT: corrosion, steel.
AUTHOR	Hayward, P.J.; George, I.M.; Woods, M.P.; Busby, T.S
TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	govt Atomic Energy of Canada Limited. AN EVALUATION OF ELECTRIC MELTER REFRACTORIES FOR CO GLASS USED FOR THE IMMOBILISATION OF NUCLEAR WASTE. 7 p. (1987). Reprinted from Glass Technology (1987) 87/00/00 CONTAINMENT: glass.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Boersma, M.D. Savannah River Lab. SC (USA). APPLICATIONS OF CHEMICAL ENGINEERING PRINCIPLES TO G FOR NUCLEAR WASTE FIXATION. 1988. 14 p. 88/00/00 Five important differences between radwaste vitrific normal industrial glassmaking are described. CONTAINMENT: glass.
AUTHOR TYPE ORGANIZATION TITLE	Marsh, G.P.; Taylor, K.J.; Sharland, S.M.; Tasker, P Lab., Oxfordshire, England). Bates, J.K.; Seefeldt, W.B. (eds.). priv Argonne National Lab. Il (USA). APPROACH FOR EVALUATING THE GENERAL AND LOCALIZED CO CARBON-STEEL CONTAINERS FOR NUCLEAR WASTE DISPOSAL.

PUBLISH	P. 227-238. Scientific Basis for Nuclear Waste Manag
DATE	Pittsburgh, PA (USA). Materials Research Society. 19
ABSTRACT	87/00/00
	The paper considers the long term corrosion of carbo
	containers for heat generating nuclear waste in a gr
	container.
KEYWORDS	CONTAINMENT: granite, corrosion.
LOCATION	
REFERENCE	
AUTHOR	Liebetrau, A.M.; Apted, M.J.; Engel, D.W.; Altenhofe
TYPE	Reid, C.R.; Strachan, D.M.; Erikson, R.L.; Alexander
ORGANIZATION	
	Pacific Northwest Lab. WA; US DOE Office of Civilian
	Waste Management, Washington, DC (USA).
TITLE	AREST (ANALYTICAL REPOSITORY SOURCE-TERM): A PROBABI
	SOURCE-TERM CODE FOR WASTE PACKAGE PERFORMANCE ANALY
PUBLISH	February 1987. 30 p.
DATE	87/02/00
ABSTRACT	The engineered barrier system is the first of severa
	and natural barriers to the release and migration of
KEYWORDS	wastes from a geologic repository to the accessible
LOCATION	CONTAINMENT: modelling, engineering.
REFERENCE	
AUTHOR	Johnson, A.B.; Dobbins, J.C.; Zaloudek, F.R.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	ASSESSMENT OF THE INTEGRITY OF SPENT FUEL ASSEMBLIES
	STORAGE DEMONSTRATIONS AT THE NEVADA TEST SITE.
PUBLISH	July 1987. 186 p.
DATE	87/07/00
ABSTRACT	This report summarizes the histories of 17 zircaloy-
	fuel assemblies used in dry storage tests and demons
	the engine maintenance and disassembly and climax fa
	the Nevada Test Site.
KEYWORDS	CONTAINMENT: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Jakubick, A.T.; Gillham, R.W.; Kahl, I.; Robin, M. (
	Hydro, Toronto).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il (USA).
PUBLISH	ATTENUATION OF PU, AM, CS AND SR MOBILITY IN CONCRET
	P. 355-368. Scientific Basis for Nuclear Waste Manag
DATE	Pittsburgh, PA (USA). Materials Research Society. 19
ABSTRACT	87/00/00
	Sorption experiments with 85Sr, 137Cs, 239Pu and 241
	types of concrete (normal density, normal density wi
	high density and high density with silica fume) were
	in a predominantly NaCl groundwater and in nitrate s
KEYWORDS	CONTAINMENT: groundwater, concrete.
LOCATION	
REFERENCE	
AUTHOR	Guppy, R. (UKAEA Harwell Lab, Materials Development
TYPE	
ORGANIZATION	United Kingdom Nirex, Ltd. (UK).

TITLE	AUTOGENOUS HEALING OF CRACKS IN CONCRETE AND ITS REL
PUBLISH	RADWASTE REPOSITORIES.
DATE	March 1988. 23 p.
ABSTRACT	88/03/00 Cracks in concrete structures within a radioactive w repository could provide fast transport pathways and could impair the performance of the concrete as a ba radionuclide migration.
KEYWORDS	CONTAINMENT: concrete, radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Philbin, J.S.; Emerson, E.L.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	BEHAVIOR OF A SIMULATED, METAL SPENT-FUEL STORAGE CA EXPLOSIVE ATTACK.
PUBLISH	1988. 10 p.
DATE	88/00/00
ABSTRACT	Experimental data and calculations to define the pot from a hostile attack upon a metal spent-fuel cask u on-site, above-ground storage are presented.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Davis, M.S.; Schweitzer, D.G.
TYPE	govt
ORGANIZATION	Brookhaven National Lab. NY (USA).
TITLE	BNL HIGH-LEVEL WASTE TECHNICAL ASSISTANCE PROGRAM FO THE NRC.
PUBLISH	J. Institute Nuclear Materials Management. V. 13 p.
DATE	
ABSTRACT	Recommendations of the US Brookhaven National Lab. t generic and priority issues needed to predict radioa package performance after repository closure are sum
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Bart, G.; Zwicky, H.U.; Aerne, E.T. Graber, T.; Z'Be Tokiwai, M. (Swiss Federal Institute for Reactor Res Wuerenlingen).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il (USA). BOROSILICATE GLASS CORROSION IN THE PRESENCE OF STEE PRODUCTS.
PUBLISH	P. 459-40. Scientific Basis for Nuclear Waste Manage Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	Since 1982, the corrosion behaviour of radioactive h waste glass and of inactive glasses of the same comp been studied in the framework of a Japanese-Swedish- Project. In addition to granite and backfilling mate influence of steel corrosion products on glass corro been investigated in experiments of up to one year a a sample surface area to leachant volume ratio of 10
KEYWORDS	CONTAINMENT: corrosion, glass.
LOCATION	
REFERENCE	

AUTHOR
TYPE

govt

ORGANIZATION

TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS

LOCATION

REFERENCE

Battelle Memorial Inst. Columbus, OH. Office of Nucl Isolation.

BUCKLING DESIGN CRITERIA FOR WASTE PACKAGE DISPOSAL MINED SALT REPOSITORIES.

Battelle Memorial Inst. Report ONWI-597. Dec. 1986. 86/12/00

CONTAINMENT: design, geologic disposal.

AUTHOR

TYPE

ORGANIZATION

TITLE

PUBLISH

DATE

ABSTRACT

Taylor, R.F.; Wall, G.P.; Ambrose, D.C.

UKAEA Harwell Lab. Chemical Engineering Div.

CALCINER PERFORMANCE IN THE VITRIFICATION OF HLW AND COLLATION OF ROTARY KILN EXPERIMENTAL DATA.

February 1988. 25 p. 88/02/00

This paper collates the results of some hundred runs calculation of high-level waste simulates using a 92 rotary kiln, and more recently a 200 mm diameter uni CONTAINMENT: modelling, thermodynamics.

KEYWORDS

LOCATION

REFERENCE

AUTHOR

Van Konynenburg, R.A.; Smith, C.F.; Culham, H.W.; Sm (Lawrence Livermore National Lab., CA).

Bates, J.K.; Seefeldt, W.B. (eds.).

priv

TYPE

ORGANIZATION

TITLE

PUBLISH

Argonne National Lab. Il. (USA).

CARBON-14 IN WASTE PACKAGES FOR SPENT FUEL IN A TUFF P. 185-196. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19 87/00/00

DATE

ABSTRACT

The Environmental Protection Agency and the Nuclear Commission have established limits on release of the spent fuel. This is of particular concern for the pr repository in tuff, because of the unsaturated condi the consequent possibility of gaseous transport of 1 CONTAINMENT: tuff.

KEYWORDS

LOCATION

REFERENCE

AUTHOR

TYPE

ORGANIZATION

TITLE

PUBLISH

DATE

ABSTRACT

Bryan, G.H.

priv

Pacific Northwest Lab. WA (USA).

CESIUM CHLORIDE COMPATIBILITY TESTING PROGRAM: ANNUA FISCAL YEAR 1986.

May 1987. 37 p.

87/05/00

A program was started to evaluate the compatibility encapsulation and storage facility- produced cesium

KEYWORDS	with 316l stainless steel under thermal conditions t
LOCATION	encountered in a geologic repository.
REFERENCE	CONTAINMENT: thermodynamics.
AUTHOR	Nieto, M.I. (Inst. de Ceramica y Vidrio, Madrid, Spa
TYPE	Rincon Lopez, J.M. (ed.)
ORGANIZATION	acad
TITLE	Centro de Investigaciones Energeticas, Medioambienta
PUBLISH	Technologicas, Madrid, (Spain).
DATE	CHEMICAL DURABILITY OF SILICOBORATE GLASSES.
ABSTRACT	P.121-139. Glasses and Glass-Ceramics for Nuclear Wa
KEYWORDS	Management. 1987. 212 p.
LOCATION	87/00/00
REFERENCE	A general view of the durability in silicoborate gla
	presented with more emphasis on the etching factors
	techniques used in this study and the experimental r
	CONTAINMENT: glass.
AUTHOR	Insalaco, J.W.
TYPE	
ORGANIZATION	Battelle Memorial Inst., Columbus, OH. Office of Was
TITLE	COMPARISON OF RESULTS FOR TEN ANALYTICAL HEAT CONDUCT
PUBLISH	AS SOLVED BY THE GENERAL HEAT TRANSFER CODE HEATING5
DATE	ENGINEERING AND TRANSFER IN NINE GEOMETRICS).
ABSTRACT	July 1987. 53 p.
KEYWORDS	87/07/00
LOCATION	Objective was to verify heatings for use in estimati
REFERENCE	temperature distribution around a waste package afte
	emplaced in a repository. The approach taken in veri
	HEATING5 to the analytical solutions for a series of
	for which analytical solutions existed.
	CONTAINMENT: thermodynamics.
AUTHOR	Warrant, M.M.; Ottinger, C.A.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	COMPILATION OF CURRENT LITERATURE ON SEALS, CLOSURES
PUBLISH	FOR RADIOACTIVE MATERIAL PACKAGINGS.
DATE	Jan. 1989. 154 p.
ABSTRACT	89/01/00
KEYWORDS	This report presents an overview of the features tha
	sealing capability of radioactive material packaging
	certified by the US Nuclear Regulatory Commission. T
	based on a review of current literature on seals, cl
	leakings for radioactive material packagings.
	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Feng, X.; Barkatt, A.; (Catholic Univ. of America, W
	DC).

TYPE	acad
ORGANIZATION	
TITLE	COMPOSITION EFFECTS ON CHEMICAL DURABILITY OF BOROSI GLASSES.
PUBLISH	Trans. Am. Nucl. Soc., 1987. V. 54. P. 110-112.
DATE	87/00/00
ABSTRACT	A preliminary glass composition, WVRG has been devel Pacific Northwest Lab for the immobilization of high radioactive waste at the West Valley Demonstation Pr
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Broothaerts, J.
TYPE	govt
ORGANIZATION	SKC/CEN. (Belgium).
TITLE	CONDITIONING AND CLADDING WASTE BY PRESS COMPACTION ENCAPSULATION IN LOW-MELTING METAL ALLOYS.
PUBLISH	CEC Report EUR 9670 EN. 1985. 93 p.
DATE	85/00/00
ABSTRACT	The management of cladding waste deserves serious co account of the voluminous amounts involved and the h of associated beta, gamma, and alpha activities. Tec conditioning this low density, highly active metal s isolated form were researched.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Striecher, M.A.; Andrews, A. (eds.)
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	CONTAINER MATERIALS FOR ISOLATION OF RADIOACTIVE WAS
PUBLISH	October 1987. 56 p.
DATE	87/10/00
ABSTRACT	The workshop reviewed the extensive data on the corr resistance of low-carbon steel in simulated salt rep environments, determined whether these data were suf recommend low-carbon steel for fabrication of the co assessed the suitability of other materials under co in the SRP.
KEYWORDS	CONTAINMENT: steel, salt.
LOCATION	
REFERENCE	
AUTHOR	Brennecke, P.; Essmann, J.; Geiser, H.; Rittscher, D
	Schuchardt, M.C.
TYPE	
ORGANIZATION	
TITLE	CONTAINERS FOR THE FINAL STORAGE OF RADIOACTIVE WAST KONRAD MINE. (in German)
PUBLISH	Atomwirtsh., Atomtech. November 1987. V. 32(11) P. 5
DATE	87/11/00
ABSTRACT	The article outlines the boundary conditions for the containers as resulting from the plans for the opera of the Konrad mine.
KEYWORDS	CONTAINMENT: occupational exposure.
LOCATION	
REFERENCE	
AUTHOR	

TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: A TECHNOLOGY AHEAD OF ITSELF.
Resources for the Future Report (Nuclear Imperatives
Trust: Dealing with Radioactive Waste.) 1987. p. 9-8
87/00/00

CONTAINMENT:

AUTHOR

Kamizono, Hiroshi; Shimizu, Isamu; Banba, Tsunetaka
Energy Research Inst., Tokai, Ibaraki. Tokai Research
Establishment).

TYPE
ORGANIZATION
TITLE

JNSTA.
CONTINUOUS-FLOW LEACH TESTS OF SIMULATED HIGH-LEVEL
IN SYNTHESIZED GROUNDWATER AND DEIONIZED WATER.

PUBLISH

J. Nucl. Sci. Technol. (Tokyo). (Apr 1987) 24(4):308

DATE

87/04/00

ABSTRACT

Simulated high-level waste glass was leached at 70½C
in one type of synthesized groundwater in Japan and
water. The MCC-4 low-flow-rate leach test method was
producing continuous-flow leach conditions.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: leaching, glass.

AUTHOR

Smyrl, W.H.; Bell, B.T.; Atanasoski, R.T.; Glass, R.
Minnesota, Minneapolis)

TYPE
ORGANIZATION
TITLE

Bates, J.K.; Seefeldt, W.B. (eds.)

acad

Argonne National Lab. Il (USA).

COPPER CORROSION IN IRRADIATED ENVIRONMENTS. THE INF
H2O2 ON THE ELECTROCHEMISTRY OF COPPER DISSOLUTION I
ELECTROLYTE.

PUBLISH

P. 591-601. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19

DATE
ABSTRACT

87/00/00

The anodic dissolution of copper has been examined i
0.1 M HCL aqueous solution in the presence of H2O2.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: corrosion, dissolution.

AUTHOR

Anantatmula, R.P.; Fish, R.L. (Rockwell Hanford Oper
Richland, WA).

TYPE
ORGANIZATION
TITLE

Bates, J.K.; Seefeldt, W.B. (eds.).

priv

Argonne National Lab. Il (USA).

CORROSION BEHAVIOR OF CONTAINER MATERIALS IN GRANDE
GROUNDWATER.

PUBLISH

P. 295-306. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19

DATE

87/00/00

ABSTRACT

Three candidate waste package container materials we
five months at 2000½C in Hanford Site Grande Ronde b
groundwater (9.75 pH) under anoxic conditions (<0.1
dissolved oxygen in water).

KEYWORDS
LOCATION

CONTAINMENT: corrosion, basalt, groundwater.

REFERENCE

AUTHOR Accary, A.
 TYPE assoc
 ORGANIZATION Commission of the European Communities, Luxembourg.
 TITLE CORROSION BEHAVIOUR OF CONTAINER MATERIALS FOR GEOLOGICAL DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE.
 PUBLISH 1985. 105 p.
 DATE 85/00/00
 ABSTRACT CEC sponsored research conducted during 1983 on the potential of container materials for the geological vitrified high-level radioactive wastes is surveyed.
 KEYWORDS CONTAINMENT: corrosion.
 LOCATION
 REFERENCE

AUTHOR Smailos, E.; Schwarzkopf, W.; Koester, R.
 TYPE
 ORGANIZATION Kernforschungszentrum Karlsruhe G.M.B.H. (Germany, F
 TITLE CORROSION BEHAVIOUR OF CONTAINER MATERIALS FOR THE DISPOSAL OF HIGH-LEVEL WASTE FORMS IN ROCK SALT FORMATIONS.
 PUBLISH May 1987. 16 p.
 DATE 87/05/00
 ABSTRACT Extensive laboratory-scale experiments to evaluate the corrosion behaviour of selected materials in brines and in situ experiments were performed.
 KEYWORDS CONTAINMENT: salt, corrosion.
 LOCATION
 REFERENCE

AUTHOR Corbett, R.A.; Morrison, W.S.; Bickford, D.F. (E.I. Nemours and Co., Wilmington, DE)
 TYPE priv
 ORGANIZATION MTPFB
 TITLE CORROSION EVALUATION OF ALLOYS FOR NUCLEAR WASTE PROCESSING
 PUBLISH Mater. Performance. (Feb 1987). V. 26(2) p. 40-44.
 DATE 87/02/00
 ABSTRACT Corrosion scouting tests were performed on stainless steel and nickel-based alloys in simulated process solutions at a facility to immobilize high-level radioactive waste incorporating it into borosilicate glass.
 KEYWORDS CONTAINMENT: corrosion.
 LOCATION
 REFERENCE

AUTHOR Marsh, G.P.; Taylor, K.J.
 TYPE govt
 ORGANIZATION Ukaea Harwell Lab. (UK).
 TITLE CORROSION OF CARBON STEEL NUCLEAR WASTE CONTAINERS IN OCEANIC SEDIMENT.
 PUBLISH Aug. 1987. 41 p.
 DATE 87/08/00
 ABSTRACT The report describes a study of the corrosion of carbon steel nuclear waste containers in deep ocean sediments, with the objective of estimating the metal allowance needed to ensure that the containers were not breached by corrosion for 100 years.
 KEYWORDS CONTAINMENT: corrosion, marine disposal.
 LOCATION
 REFERENCE

AUTHOR	Diegle, R.B.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	CORROSION OF PROPOSED CANISTER MATERIALS IN SALT REP (WASTE POLICIES AND PROGRAMS, HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 607-612.
DATE	84/03/00
ABSTRACT	A titanium-molybdenum-nickel compound is being consi corrosion resistant alloy for fabricating radioactiv canister overpacks. Test of the materials are discus
KEYWORDS	CONTAINMENT: corrosion.
LOCATION	
REFERENCE	
AUTHOR	Schweitzer, D.G.; Davis, D.S.
TYPE	govt
ORGANIZATION	Brookhaven National Lab. NY (USA).
TITLE	CORROSION RESISTANT STORAGE CONTAINER FOR RADIOACTIV
PUBLISH	1984. 38 p.
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
DATE	84/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: corrosion.
LOCATION	
REFERENCE	
AUTHOR	Haberman, J.H.; Frydrych, D.J.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	CORROSION STUDIES OF A216 GRADE WCA STEEL IN HYDROTH MAGNESIUM-CONTAINING BRINES.
PUBLISH	February 1988. 13 p.
DATE	88/02/00
ABSTRACT	The US Department of Energy's salt repository projec investigating the general corrosion resistance of ca steel as a candidate material for waste package cont
KEYWORDS	CONTAINMENT: salt, corrosion.
LOCATION	
REFERENCE	
AUTHOR	Schwarzkopf, W.; Schoch, L.; Koester, R. (Kernforsch Karlsruhe G.M.B.H., Germany, F.R.. Inst. fuer Nuklea Entsorgungstechnik).
TYPE	
ORGANIZATION	Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt Gesellschaft E.V., Bonn, Germany, (F.R.).
TITLE	CORROSION STUDIES OF PACKAGING MATERIALS FOR HIGH-LE WASTES. IN-SITU CORROSION EXPERIMENTS (FIELD TESTS A MINE). (in German)
PUBLISH	P. 477-480. Annual Meeting on Nuclear Technology '87 Proceedings. Session 4: Fuel Cycle and Waste Process 829 p.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: corrosion, salt.
LOCATION	
REFERENCE	
AUTHOR	Westerman, R.E.; Pitman, SD.G.; Haberman, J.H.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).

TITLE	CORROSION TESTING OF TYPE 304L STAINLESS STEEL IN TU
PUBLISH	GROUNDWATER ENVIRONMENTS.
DATE	November 1987. 69 p.
ABSTRACT	87/11/00
	The stress-corrosion cracking resistance of type 304 steel to elevated temperatures in tuff rock and tuff environments was determined under irradiated and non conditions using u-bend specimens and slow strain ra
KEYWORDS	CONTAINMENT: corrosion, thermodynamics, groundwater.
LOCATION	
REFERENCE	
AUTHOR	Tait, J.C.; Hayward, P.J.; Rummens, H.E.C.; Wilkin,
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	CRYSTALLIZATION AND VISCOSITY OF SPHENE GLASS CERAMI
	SIMULATED NUCLEAR FUEL RECYCLE WASTE.
PUBLISH	6 p. (1986). Reprinted from Physics and Chemistry of
	(1986) 27(3):134-139.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Rankin, W.N.; Ward, C.R.
TYPE	priv/govt
ORGANIZATION	E.I. du Pont de Nemours & Co. SC (USA).
TITLE	DECONTAMINATION OF DWPf CANISTERS BY GLASS FRIT BLAS
	POLICIES AND PROGRAMS, HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA).
	1984. V. 1, p. 285-291.
DATE	84/03/00
ABSTRACT	High-level radioactive waste at the Savannah River P incorporated in borosilicate glass for permanent dis During waste encapsulation operations, the outside o canisters will become contaminated. Tests have demon canister decontamination can be accomplished by blas surface with glass frit. Three blasting techniques a
KEYWORDS	CONTAINMENT: glass, steel.
LOCATION	
REFERENCE	
AUTHOR	Teer, B.R.
TYPE	acad
ORGANIZATION	
TITLE	DEMONSTRATION OF CASK TRANSPORTATION AND DRY STORAGE
	NUCLEAR FUEL.
PUBLISH	J. Institute Nuclear Materials Management. V. 13. p.
DATE	
ABSTRACT	Dual purpose shipping and storage casks for spent nu are being demonstrated.
KEYWORDS	CONTAINMENT: cask, transport.
LOCATION	
REFERENCE	
AUTHOR	Arneson, M.C.; Boase, C.A.; Chambers, K.W.; Gardy, E
TYPE	K.B.
ORGANIZATION	govt
TITLE	Atomic Energy of Canada Limited.
	DESIGN AND USE OF A SEALED RADIOACTIVE LEACH TEST AP

PUBLISH

6 p. (1986). Reprinted from Advances in Ceramics 20: Waste Management II, p. 551-556, 1986.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

86/00/00

CONTAINMENT: leaching.

AUTHOR

Jones, T.E.; Coles, D.G.; Britton, R.C.; Burnell, J. Northwest Lab., Richland, WA).

TYPE
ORGANIZATION
TITLE

priv

Argonne National Lab. Il (USA).

DEVELOPMENT AND EVALUATION OF A TRACER-INJECTION HYD
TECHNIQUE FOR STUDIES OF WASTE PACKAGE INTERACTIONS.

PUBLISH

P. 421-432. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19

DATE
ABSTRACT

87/00/00

A tracer-injection system has been developed for use
characterizing reactions of waste package materials
hydrothermal conditions.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: thermodynamics.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

govt

DEVELOPMENT OF A CERAMIC-BASED WASTE FORM TO IMMOBIL
DOE Idaho National Lab Report ONWI-617. Oct 86.

86/10/00

CONTAINMENT: ceramics.

AUTHOR
TYPE
ORGANIZATION

Werner, E.A.

TITLE

Kernforschungsanlage Juelich G.M.B.H. (Germany, F.R.
Reaktorentwicklung; Technische Hochschule Aachen.

DEVELOPMENT OF A HIP-FACILITY (HOT ISOSTATIC PRESSUR
PRODUCTION OF HIGH RADIOACTIVE BUNDLES FOR FINAL DIS
German)

PUBLISH
DATE
ABSTRACT

September 1987. 169 p.

87/09/00

A further development in the final disposure of high
waste provides to embed the burnt nuclear fuel safel
ceramic matrix. It is intended to use a HIP-facility
compressing the ceramic.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: ceramics.

AUTHOR
TYPE

priv/govt

ORGANIZATION	Ontario Hydro. (Canada).
TITLE	DEVELOPMENT OF INTEGRATED METALLIC CONTAINER: PROJEC
PUBLISH	Mechanical Research Department, Ontario Hydro. 1985.
DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Thomas, G.F. (Ontario Hydro Research Lab., Toronto)
TYPE	govt
ORGANIZATION	
TITLE	DIFFUSIONAL RELEASE OF A SINGLE COMPONENT MATERIAL F
PUBLISH	CYLINDRICAL WASTE FORM.
DATE	Ann. Nucl. Energy. 1987. V. 14(6) P. 283-294.
ABSTRACT	87/00/00
	The diffusion of a single component material from a
	cylindrical waste form, initially containing a unifo
	concentration of the material, is investigated.
KEYWORDS	CONTAINMENT: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Vance, E.R.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	DISSOLUTION OF SPHENE AND SPHENE GLASS-CERAMICS IN A
PUBLISH	9 p. (1986). Reprinted from Advances in Ceramics 20:
	Waste Management II, p. 231-239, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: groundwater, glass.
LOCATION	
REFERENCE	
AUTHOR	Berusch, A.; Gause, E. (Dept. of Energy, Washington,
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il (USA).
PUBLISH	DOE PROGRESS IN ASSESSING THE LONG TERM PERFORMANCE
DATE	PACKAGE MATERIALS.
ABSTRACT	P. 13-28. Scientific Basis for Nuclear Waste Managem
	Pittsburgh, PA (USA). Materials Research Society. 19
	87/00/00
	Under the Nuclear Waste Policy Act of 1982 (NWPA) (1
	Dept. of Energy (DOE) is conducting activities to se
	characterize candidate sites suitable for the constr
	operation of a geologic repository for the disposal
	high-level nuclear wastes.
KEYWORDS	CONTAINMENT: basalt, salt.
LOCATION	
REFERENCE	
AUTHOR	Rasmussen, T.L.; Schoonen, D.H.; Feldman, E.M.; Fish
TYPE	(Idaho National Engineering Lab., EG and G Idaho, In
ORGANIZATION	Falls); Post, R.G. (ed.).
	govt

TITLE	DRY ROD CONSOLIDATION TECHNOLOGY DEVELOPMENT.
PUBLISH	p. 555-562. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ: Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	The DOE Office of Civilian Radioactive Waste Management is funding a program to consolidate commercial spent fuel testing in dry storage casks and to develop technology to be fed into other programs.
KEYWORDS	CONTAINMENT: cask.
LOCATION	
REFERENCE	
AUTHOR	Kuchinski, F.A.
TYPE	acad
ORGANIZATION	Rutgers-The State University, NJ (USA).
TITLE	EFFECT OF LEAD SPECIES ON THE DURABILITY OF SIMULATED WASTE GLASS.
PUBLISH	1987. 282 p.
DATE	87/00/00
ABSTRACT	It has been shown that the incorporation of lead metal in a corrosion environment reduces the leaching rate of nuclear waste glasses. This study evaluated the effects of lead metal alloys, glasses and soluble species on the corrosion of waste glass.
KEYWORDS	CONTAINMENT: corrosion, glass.
LOCATION	
REFERENCE	
AUTHOR	Feng, X.; Barkatt, A. (Catholic Univ. of America, Washington, DC).
TYPE	Bates, J.K.; Seefeldt, W. B. (eds.).
ORGANIZATION	acad
TITLE	Argonne National Lab. IL (USA). EFFECTS OF AQUEOUS PHASE COMPOSITION ON THE LEACH BEHAVIOR OF NUCLEAR WASTE GLASSES.
PUBLISH	P. 519-531. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987.
DATE	87/00/00
ABSTRACT	A systematic matrix of leach tests on a West Valley glass composition is described. It was concluded that increasing leachant strength appears to depress the leach rates in near-neutral media but enhances the leach rates under moderately acidic conditions.
KEYWORDS	CONTAINMENT: leaching.
LOCATION	
REFERENCE	
AUTHOR	Jantzen, C.M.
TYPE	acad
ORGANIZATION	
TITLE	EFFECTS OF Eh (oxidation potential) ON BOROSILICATE GLASS DURABILITY.
PUBLISH	Advances in Ceramics 8: 385-393.
DATE	84/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Ebert, W.L.; Bates, J.K.; Gerding, T.J.; Van Konynen

TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il (USA).
PUBLISH	EFFECTS OF GAMMA RADIATION ON GROUNDWATER CHEMISTRY
DATE	REACTION IN A SATURATED TUFF ENVIRONMENT.
ABSTRACT	P. 613-622. Scientific Basis for Nuclear Waste Manag
KEYWORDS	Pittsburgh, PA (USA). Materials Research Society. 19
LOCATION	87/00/00
REFERENCE	The Nevada Nuclear Waste Storage Investigations Proj
AUTHOR	completed a series of experiments that provide insig
TYPE	groundwater chemistry and glass waste form performan
ORGANIZATION	presence of a gamma radiation field at 900°C. The ma
TITLE	of radiation is to lower the groundwater pH to a val
PUBLISH	CONTAINMENT:tuff, groundwater, chemistry, glass.
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Hietanen, S.; Klemetti, K.; Aaltonen, P. (Valtion Te
TYPE	Tutkimuskeskus, Espoo, Finland. Metallilaboratorio).
ORGANIZATION	
TITLE	Voimayhtioiden Ydinjätetöimikunta, Helsinki, (Finl
PUBLISH	ELECTROCHEMICAL STUDY ON THE CORROSION OF THE METAL
DATE	EMBEDDED IN CONCRETE. (in Finnish)
ABSTRACT	January 1987. 37 p.
KEYWORDS	87/01/00
LOCATION	The corrosion rates of metal waste embedded in concr
REFERENCE	repository conditions is evaluated.
AUTHOR	CONTAINMENT: corrosion.
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	ELECTRON BEAM WELDING FOR COPPER SPENT FUEL DISPOSAL
PUBLISH	PHASE ONE.
DATE	1987. 118 P.
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	

PUBLISH	CANISTERS. p. 547-554. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Pacific Northwest Lab. is preparing 30 radioactive c containing borosilicate glass for use in high-level repository related tests at the Asse salt mine.
KEYWORDS	CONTAINMENT: glass, salt.
LOCATION	
REFERENCE	
AUTHOR	Christ, B.G. (Transnuklear G.M.B., Hanau, Germany, F
TYPE	
ORGANIZATION	Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt Gesellschaft E.V., Bonn, Germany, (F.R.).
TITLE	EMPLOY OF TRANSPORT/FINAL STORAGE CONTAINERS FOR RAD WASTES AT KONRAD MINE. (MOSTRAM PROTECT CONTAINER).
PUBLISH	P. 469-472. Annual Meeting on Nuclear Technology '87 Proceedings. Session 4: Fuel Cycle and Waste Process 829 p.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Nuttall, K.; Chadha, J.A.; Carmichael, T.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	ENGINEERED BARRIER RESEARCH IN CANADA.
PUBLISH	18 p. (1986). Proceedings of an International Sympos Siting, Design and Construction of Underground Repos Radioactive Wastes Organized by the International At Agency and held in Hanover, p. 431-448, 3-7 March 19 86/00/00
DATE	
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Mills, W.J.
TYPE	govt
ORGANIZATION	Hanford Engineering Development Lab. WA (USA).
TITLE	ENVIRONMENTALLY ASSISTED CRACKING MECHANISMS IN REPO ENVIRONMENTS.
PUBLISH	Feb. 1987. 39 p.
DATE	87/02/00
ABSTRACT	This paper assesses how environmentally assisted cra mechanisms in candidate container materials can be i enhance the accuracy of long term projections of per the repository.
KEYWORDS	CONTAINMENT: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	James, L.A.; Duncan, D.R.
TYPE	
ORGANIZATION	Hanford Engineering Development Lab, Richland, WA; R International Corp., Richland, WA; Rockwell Hanford
TITLE	ENVIRONMENTALLY-ASSISTED CRACKING BEHAVIOR OF A HIGH

PUBLISH	NUCLEAR WASTE CONTAINER ALLOY.
DATE	June 1987. 16 p.
ABSTRACT	87/06/00 The environmentally assisted cracking behavior of ca Society for testing and materials A27 steel in a sim groundwater environment was studied using both stati loaded and cyclically loaded specimens.
KEYWORDS	CONTAINMENT: groundwater.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Institute, OH (USA). Office of Nuc Isolation.
TITLE	ERG REVIEW OF CONTAINMENT FAILURE PROBABILITY AND RE FUNCTIONAL DESIGN CRITERIA.
PUBLISH	June 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Heimann, R.B.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	EVALUATING THE DURABILITY OF A SIMULATED NUCLEAR WAS STATISTICAL APPROACH.
PUBLISH	
DATE	88/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass, analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Interrante, C.; Escalante, E.; Fraker, A.; Kaufman, W.; Shull, R.
TYPE	govt
ORGANIZATION	National Bureau of Standards. Washington, DC (USA). Materials Science and Engineering; Nuclear Regulator Commission, Washington, DC (USA).
TITLE	EVALUATION AND COMPILATION OF DOE WASTE PACKAGE TEST BIANNUAL REPORT, DECEMBER 1985-JULY 1986.
PUBLISH	Mar 1987. 131 p.
DATE	87/03/00
ABSTRACT	This report summarizes results to date of NBS evalua Department of Energy (DOE) activities in waste packa for containment of radioactive high-level nuclear wa CONTAINMENT:
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Interrante, C.; Escalante, E.; Fraker, A.; Harrison, R.; Linzer, M.; Ricker, R.; Ruspi, J.
TYPE	govt
ORGANIZATION	National Bureau of Standards, Washington, DC. Metallurgy Div.; Nuclear Regulatory Commision, Washi Div. of High-Level Waste Management.
TITLE	EVALUATION AND COMPILATION OF DOE WASTE PACKAGE TEST BIANNUAL REPORT, AUG. 1986- JAN. 1987.

PUBLISH
DATE
ABSTRACT

October 1987, 136 p.
87/10/00

This report summarizes results of the National Bureau of Standards evaluations of Department of Energy active waste packages designed for containment of high-level radioactive nuclear waste. The waste package is a permanently engineered barrier that is part of a permanent repository for HLW.

KEYWORDS
LOCATION

CONTAINMENT:

REFERENCE

AUTHOR
TYPE
ORGANIZATION

Hall, A.R.; Boulton, K.A.; Marples, J.A.C.

TITLE

UKAEA Harwell Lab, Chemistry Div.; Department of the Environment (UK).

PUBLISH

EVALUATION OF SOLIDIFIED HIGHLY-ACTIVE WASTE: LEACHING GLASS CONTAINING PU AND AM. FINAL REPORT- DEC. 1986

DATE

October 1987. 16 p.

ABSTRACT

87/10/00

Glass samples have been made on the 20G scale from mixed and inactive simulants of the magnox and thorp high-level waste that are expected to be vitrified in the windscale vitrification plant.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: glass.

AUTHOR
TYPE
ORGANIZATION
TITLE

acad

PUBLISH

EVALUATION OF THE LOCALIZED CORROSION OF CARBON STEEL FOR NUCLEAR WASTE DISPOSAL IN GRANITE ENVIRONMENTS.

DATE

Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 421.

ABSTRACT

85/09/00

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: corrosion, geologic disposal.

AUTHOR
TYPE
ORGANIZATION
TITLE

Pitman, S.G. (Pacific Northwest Lab., Richland, WA). Bates, J.K.; Seefeldt, W.B. (eds.).

PUBLISH

priv

DATE

Argonne National Lab. IL (USA).

ABSTRACT

EVALUATION OF THE SUSCEPTIBILITY OF ASTM A216 GRADE STEEL TO STRESS CORROSION CRACKING IN SIMULATED SALT ENVIRONMENTS.

P. 239-249. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987/00/00

In current conceptual designs, a mild steel (ASTM A216) is the reference container material for use in high-level nuclear waste packages intended for emplacement in a repository. The resistance of the steel to stress corrosion cracking (SCC) is being investigated as part of the ongoing research underway to verify the suitability of the material for waste package applications.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: corrosion, salt, steel.

AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Jansen, G. Battelle Memorial Institute, Columbus, OH. Office of Waste Isolation. EXPECTED WASTE PACKAGE PERFORMANCE FOR NUCLEAR WASTE IN THREE SALT FORMATIONS. August 1987. 447 p. 87/08/00 Expected waste package lifetimes and radioactive rel the package were predicted at seven sites in three g formations for both commercial high-level waste and nuclear fuel from pressurized water reactors using n conditions from preliminary analyses. CONTAINMENT: salt.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Godon, N.; Thomassin, J.H.; Touray, J.C. (Orleans Un France) (Lab de Metallogenie et Geochimie Minerale) acad EXPERIMENTAL ALTERATION OF R7T7 NUCLEAR MODEL GLASS WITH DIFFERENT SALINITIES: IMPLICATIONS FOR THE SELE GEOLOGICAL REPOSITORIES. J. Mater. Sci. January 1988. V. 23(1). P. 126-134. 88/01/00 In order to simulate the leaching of nuclear wastes repositories percolated by solutions of variable sal leaching tests of R7T7 glass in solutions with diffe contents have been performed at 900C and 1 bar using procedure. CONTAINMENT: leaching, glass.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Sawyer, W.D. II; Daemen, J.J.K. govt/acad Arizona University, Tucson. Dept. of Mining and Geol Engineering; Nuclear Regulatory Commission, Washingt of Engineering. EXPERIMENTAL ASSESSMENT OF THE SEALING PERFORMANCE O BOREHOLE PLUGS. October 1987. 305 p. 87/10/00 Bentonite, which contains the clay mineral montmoril being considered as part of a multicomponent enginee which will seal geological repositories of high-leve radioactive wastes. CONTAINMENT: clay.

AUTHOR	Wilson, C.N.; Shaw, H.F. (Westinghouse Hanford Co., F. Bates, J.K.; Seefeldt, W.B. (eds.)).
TYPE	priv
ORGANIZATION	Argonne National Lab. Il (USA).
TITLE	EXPERIMENTAL STUDY OF THE DISSOLUTION OF SPENT FUEL NATURAL GROUND WATER.
PUBLISH	P. 123-130. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
DATE	87/00/00
ABSTRACT	Semi-static dissolution tests using pressurized water spent fuel rod segments and NNWSI reference J-13 well sealed stainless steel vessels at 850°C are being co support of the waste package task of the NNWSI proje CONTAINMENT: groundwater, steel.
KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	Lammertz, H.; Kroth, K. (Kernforschungsanlage Jueli Germany, F.R. Inst. fuer Chemische Technologie der N Entsorgung)
TYPE	
ORGANIZATION	Deutches Atomforum E.V., Bonn, Germany, F.R.; Kernte Gesellschaft E.V., Bonn, Germany, (F.R.).
TITLE	EXPERIMENTS ON THE OXIDATION OF RADIOLYTIC HYDROGEN WITH CEMENTED MAW. (in German)
PUBLISH	P. 383-386. Annual Meeting on Nuclear Technology '88 Proceedings. Session 4.: Fuel Cycle and Waste Proces Inforum Verl. May 1988. 789 p.
DATE	88/05/00
ABSTRACT	There are two reactions selected for closer study: h admixture of an oxidizing agent to the cement matrix backfilling of free spaces in the drum with a pourab containing an oxidizing agent.
KEYWORDS	CONTAINMENT: cask, design.
LOCATION	
REFERENCE	

AUTHOR	McElroy, J.L.; Holton, L.K.Jr.; Burkholder, H.C.; Br Minor, J.E.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA; Kernforschungszentrum Kar G.M.B.H., Germany, F.R.; Gesellschaft fuer Strahlen Umweltforschung M.B.H., Muenchen, Germany, (F.R.).
TITLE	FABRICATION OF ISOTOPIC HEAT AND RADIATION SOURCES F FEDERAL REPUBLIC OF GERMANY.
PUBLISH	September 1987. 6 p.
DATE	87/09/00
ABSTRACT	Pacific Northwest Lab has filled 30 German-made can highly radioactive borosilicate glass. These caniste containing specified amounts of 137Cs and 90 Sr, wil using a gas tungsten arc welder and will be decontam nonsmearable limits using an electropolishing system

KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	

AUTHOR	Gause, E.P.; Abraham, N. (Roy F. Weston, Inc., Washi Post, R.G. (ed.))
TYPE	priv

ORGANIZATION TITLE	FEASIBILITY ASSESSMENT OF COPPER-BASE WASTE PACKAGE MATERIALS IN NUCLEAR WASTE REPOSITORIES SITED IN BAS TUFF.
PUBLISH	P. 501-508. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	This paper details the results of testing, literatur and evaluations that were performed for each of the criteria on each of the three conceptual container d
KEYWORDS	CONTAINMENT: copper, basalt, tuff.
LOCATION	
REFERENCE	
AUTHOR	Tait, J.C.; Hocking, W.H.; Betteridge, J.S.; Bart, G
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	FIELD BURIAL RESULTS AND SIMS ANALYSIS OF THE CHALK BLOCKS.
PUBLISH	7 p. (1986). Reprinted from Advances in Ceramics 20: Waste Management II, p. 559-565, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Pusch, R.; Boergesson, L. (Swedish Geological Co., L Sweden); Ramqvist, G. (El-Tekno Co., Luleaa, Sweden)
TYPE	priv
ORGANIZATION	Swedish Nuclear Fuel and Waste Management Co., Stock
TITLE	FINAL REPORT OF THE BOREHOLE, SHAFT AND TUNNEL SEALI
PUBLISH	January 1987. 79 p.
DATE	87/01/00
ABSTRACT	The borehole plugging experiment comprised field tes sealing function and the practicality in handling an application of plugs consisting of segments of perfo casings filled with cylindrical blocks of highly com sodium bentonite.
KEYWORDS	CONTAINMENT: waste handling and emplacement.
LOCATION	
REFERENCE	
AUTHOR	Peterson, E.W.; Lagus, P.L.; Lie, K.
TYPE	priv
ORGANIZATION	S-Cubed, La Jolla, CA (USA).
TITLE	FLUID FLOW MEASUREMENTS OF TEST SERIES A AND B FOR T SCALE SEAL PERFORMANCE TESTS.
PUBLISH	December 1987. 141 p.
DATE	87/12/00
ABSTRACT	This report contains the results of gas flow, tracer and brine flow tests conducted on concrete seals in horizontal configurations. The test objectives were the seal performance and to determine if there exist effects which could influence future SSSPT designs.
KEYWORDS	CONTAINMENT: risk analysis, safety analysis.
LOCATION	
REFERENCE	
AUTHOR	Alamo, J. (Valentia Univ, Spain. Dept. de Quimica In

TYPE	Rincon Lopez, J.M. (ed.)
ORGANIZATION	acad Centro de Investigaciones Energeticas, Medioambientales y Tecnologicas, Madrid, (Spain).
TITLE	FORMATION OF NZP CERAMICS FOR THE IMMOBILIZATION OF RADIONUCLIDES.
PUBLISH	P.95-106. Glasses and Glass-Ceramics for Nuclear Waste Management. 1987. 212 p.
DATE	87/00/00
ABSTRACT	The problem of radioactive waste management is briefed from the crystal chemical point of view. Some alternatives compared and the synthesis and properties of NZP ceramics reviewed.
KEYWORDS	CONTAINMENT: ceramics.
LOCATION	
REFERENCE	
AUTHOR	Onofrei, M.; Raine, D.K.; Hocking, W.H.; George, K.; J.S.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	GAMMA RADIOLYSIS EFFECTS ON LEACHING BEHAVIOUR OF CERAMIC MATERIALS FOR NUCLEAR FUEL WASTE IMMOBILIZATION CONTAINMENT
PUBLISH	11 p. (1986). Reprinted from Advances in Ceramics 20 Waste Management II, p. 329-339, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: leaching, ceramics.
LOCATION	
REFERENCE	
AUTHOR	Tait, J.C.; Wilkin, D.L.; Hamon, R.F.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	GAMMA-RADIOLYSIS EFFECTS ON LEACHING OF NUCLEAR FUEL WASTE INFLUENCE OF GROUNDWATERS AND GRANITE ON GASEOUS RADON
PUBLISH	PRODUCTS.
DATE	1986. 25 p.
ABSTRACT	86/00/00
KEYWORDS	CONTAINMENT: groundwater, granite, leaching.
LOCATION	
REFERENCE	
AUTHOR	Sartori, D.E. (Atomic Energy Corp. of South Africa Ltd, Pretoria); De Luca, G. (Electricity Supply Commission, Johannesburg, S.A.)
TYPE	govt
ORGANIZATION	South African Association of Physicists in Medicine, Pretoria.
TITLE	GAMMA-RAY DOSE RATES RESULTING FROM THE RERACKING OF SPENT FUEL INTO HIGH-DENSITY STORAGE RACKS.
PUBLISH	P. 44. South African Association of Physicists in Medicine, Biology: 27. Annual Congress, 11-13 March 1987, Bloemfontein.
DATE	1987. 73 p.
ABSTRACT	87/00/00
KEYWORDS	CONTAINMENT: health.
LOCATION	
REFERENCE	

AUTHOR	priv/govt
TYPE	Ontario Hydro. (Canada).
ORGANIZATION	GAS-METAL-ARC WELDING STUDIES FOR THE FINAL CLOSURE
TITLE	NUCLEAR FUEL WASTE DISPOSAL CONTAINERS.
PUBLISH	1987. 47 P.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	priv/govt
TYPE	Ontario Hydro. (Canada).
ORGANIZATION	GAS-TUNGSTEN-ARC WELDING OF INCONEL 625 FOR IRRADIAT
TITLE	FUEL WASTE DISPOSAL CONTAINERS.
PUBLISH	1986. 13 P.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	Boult, K.A.; Dalton, J.T.; Eccles, E.W.; Hough, A.;
TYPE	J.A.C.; Paige, E.L.; Sutcliffe, P.W.

ORGANIZATION	UKAEA Harwell Lab. Chemistry Div.; Department of the
TITLE	London, (UK).
PUBLISH	GLASS COMPOSITIONS SUITABLE FOR PFR WASTES. ANNUAL P
DATE	REPORT 1985-86.
ABSTRACT	September 1987. 38 p.
	87/09/00
	In previous work, a glass composition had been ident
	suitable for vitrifying high-level wastes from the p
	fast reactor fuel reprocessing plant. This paper is
	continuation of these studies.
KEYWORDS	CONTAINMENT: glass, reprocessing.
LOCATION	
REFERENCE	

AUTHOR	McDaniel, E.W.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	GROUTING AS A WASTE IMMOBILIZATION/DISPOSAL METHOD.
PUBLISH	1987. 18 p.
DATE	87/00/00
ABSTRACT	Many options are available today for the immobilizat
	disposal of wastes that contain environmentally harm
	materials. The option chosen depends upon the type o
	regulatory requirements, and economics of process.
KEYWORDS	CONTAINMENT: waste handling and emplacement.
LOCATION	
REFERENCE	

AUTHOR	Robinson, S.M.; Gilliam, T.M.; McDaniel, E.W.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	HEAT TRANSFER ANALYSES FOR GROUT DISPOSAL OF RADIOAC
	DOUBLE-SHELL SLURRY AND CUSTOMER WASTES.
PUBLISH	April 1987. 46 p.

DATE	87/04/00
ABSTRACT	Grout immobilization is being considered by Rockwell operations as a permanent method for several radioactive streams.
KEYWORDS	CONTAINMENT: thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Palancar, M.C.; Luis, M.A.; Luis, P.; Aragon, J.M.; (Universidad Complutense de Madrid, Spain. Dept. Fis de Procesos Industriales)
TYPE	Rincon Lopez, J.M. (ed.).
ORGANIZATION	acad Centro de Investigaciones Energeticas, Medioambientales y Tecnologicas, Madrid, Spain; Instituto de Ceramica y Materiales, Madrid, Spain.
TITLE	HEAT TRANSFER IN VITRIFIED RADIOACTIVE WASTE.
PUBLISH	P.107-119. Glasses and Glass-Ceramics for Nuclear Waste

DATE	Management. 1987. 212 p.
ABSTRACT	87/00/00 An experimental method for measuring the thermal convection coefficient of borosilicate glass cylinders containing a simulated high-level radioactive waste, described.
KEYWORDS	CONTAINMENT: glass, thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Keyhani, M.; Kulacki, F.A.; Christiansen, R.N.
TYPE	acad
ORGANIZATION	Ohio State Univ., Columbus, OH; Battelle Memorial Institute, OH. Office of Nuclear Waste Isolation.
TITLE	HEAT TRANSFER WITHIN SPENT FUEL CANISTERS: PHASE TWO EXPERIMENTAL LABORATORY STUDY.
PUBLISH	April 1987. 207 p.
DATE	87/04/00
ABSTRACT	The primary goal of this research was to develop a correlation for convective heat transfer coefficient for fuel bundles such as those encountered in the storage and spent nuclear fuel.
KEYWORDS	CONTAINMENT: thermodynamics.
LOCATION	
REFERENCE	

AUTHOR	Hench, L.L; Clark, D.E.; Campbell, J.
TYPE	priv
ORGANIZATION	
TITLE	HIGH-LEVEL WASTE IMMOBILIZATION FORMS.
PUBLISH	Nuclear and Chemical Waste Management 5: 149-173.
DATE	84/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	HLW CONTAINER CORROSION IN GEOLOGICAL DISPOSAL CONDITIONS
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 445.

DATE	85/09/00
ABSTRACT	
KEYWORDS	CONTAINMENT: corrosion.
LOCATION	
REFERENCE	
AUTHOR	Aines, R.D.; Weed, H.C.; Bates, J.K.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA; Argonne Nationa
TITLE	(USA).
PUBLISH	HYDROGEN SPECIATION IN HYDRATED LAYERS ON NUCLEAR WA
DATE	15 January 1987. 13 p.
ABSTRACT	87/01/15
	As part of the Nevada Nuclear Waste Storage Investig
	Project, we have used infrared spectroscopy to deter
	hydrogen speciations in three nuclear waste glass co
	CONTAINMENT: glass.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Yanagisawa, Kazumichi; Nishioka, Mamoru; Yamasaki, N
	(Kochi Univ. (Japan).)
TYPE	acad
ORGANIZATION	JNSTA.
TITLE	IMMOBILIZATION OF CESIUM INTO POLLUCITE STRUCTURE BY
	HOT-PRESSING.
PUBLISH	J. Nucl. Sci. Technol. (Tokyo). (Jan 1987) 24(1):51-
DATE	87/01/00
ABSTRACT	In order to immobilize Cs into pollucite structure,
	reactions of Cs with amorphous aluminosilicate (sili
	sinter) and with mixtures of low-quartz (silicastone
	Al(OH) ₃ were performed.
	CONTAINMENT:
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	IMMOBILIZATION OF RADIOACTIVE WASTES IN HYDROTHERMAL
	ROCK, (III) PROPERTIES OF WASTE FORM CONTAINING SIMU
	HIGH-LEVEL RADIOACTIVE WASTE.
PUBLISH	J. Nuclear Science and Technology - Japan (June 1986
DATE	86/06/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Glasser, F.P.; MacPhee, D.; Atkins, M.; Beckley, N.;
	(Aberdeen Univ., UK); McHugh, G.; Mattingly, N.J.; N
TYPE	Wilding, C.R. (UKAEA Harwell Lab. Materials Developm
ORGANIZATION	govt/acad
TITLE	Department of the Environment. London (UK).
PUBLISH	IMMOBILIZATION OF RADIOACTIVE WASTE IN CEMENT BASED
DATE	1988. 106 p.
ABSTRACT	88/00/00
	The modelling of cement behavior at longer ages is r
	Factors studied include composition, pH and E _{SUB} (H).
	stresses arising from irradiation are evaluated.
KEYWORDS	CONTAINMENT: cement.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

DATE
ABSTRACT

Fujiki, Y.; Sasaki, T.; Komatsu, Y.

govt/acad

National Institute for Researchers in Inorganic Materials
(Japan).

IMMOBILIZATION OF RARE-EARTH METAL IONS FROM AQUEOUS
CRYSTALLINE HYDRATED TITANIA FIBERS.

Yogyo Kyokai-Shi. May 1987. V. 95(5) p. 465-467.

87/05/00

From a viewpoint of the treatment of high-level radioactive
liquid wastes, the immobilization of some rare-earth elements
from aqueous solutions was studied by the use of the
titania fibers as a cation adsorbent.

CONTAINMENT:

James, J.M.; Smith, D.L.

UKAEA Atomic Energy Establishment, Winfrith.

IMMOBILIZATION OF SHREDDED WASTE IN A CEMENT MONOLITH
November 1987. 42 p.

87/11/00

During 1983-84 work was continued on the development of a
process for the encapsulation of shredded waste in cement.

CONTAINMENT: cement.

Solomah, A.G.; Sridhar, T.S.; Jones, S.C.

govt

Atomic Energy of Canada Limited.

IMMOBILIZATION OF URANIUM-RICH HIGH-LEVEL RADIOACTIVE
WASTE IN SYNROC-FA.

7 p. (1986). Reprinted from Advances in Ceramics 20:
Waste Management II:259-265, 1986.

86/00/00

CONTAINMENT:

Vance, E.R.; Urquhart, S.; Anderson, D.; George, I.M.

govt

Atomic Energy of Canada Limited.

IMMOBILIZATION OF URANIUM-RICH HIGH-LEVEL NUCLEAR WASTE
10 p. (1986). Reprinted from Advances in Ceramics 20:
Waste Management II, p. 249-258, 1986.

Waste Management II, p. 249-258, 1986.

86/00/00

KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Bullen, D.B.; Gdowski, G.E.; McCright, R.D.
TYPE	
ORGANIZATION	Science and Engineering Associates, Inc., Pleasanton
TITLE	Lawrence Livermore National Lab. CA (USA). IMPACT OF PHASE STABILITY ON THE CORROSION BEHAVIOR AUSTENITIC CANDIDATE MATERIALS FOR NNWSI.
PUBLISH	October 1987. 12 p.
DATE	87/10/00
ABSTRACT	A review of the technical literature with respect to stability of 304l, 316l and 825 is presented. The im martensitic transformations, carbide precipitation a intermediate phase formation on the mechanical prope corrosion behavior of these alloys at repository rel conditions is discussed.
KEYWORDS	CONTAINMENT: corrosion.
LOCATION	
REFERENCE	
AUTHOR	Obrien, M.J.; Rigg, R.B.
TYPE	priv
ORGANIZATION	British Nuclear Fuels Ltd., (UK).
TITLE	IMPROVEMENTS IN WASTE ENCAPSULATION.
PUBLISH	29 July 1987.
DATE	87/07/29
ABSTRACT	A drum to recieve radioactive waste and an encapsula such as cement is located on a vibratable platform b charge chute. The device is described.
KEYWORDS	CONTAINMENT: design.
LOCATION	
REFERENCE	
AUTHOR	Buelt, J.L.; Timmerman, C.L.; Oma, K.H.; Fitzpatrick
TYPE	Carter, J.G.
ORGANIZATION	priv
TITLE	Pacific Northwest Lab. WA (USA). IN SITU VITRIFICAION OF TRANSURANIC WASTES: AN UPDAT EVALUATION AND APPLICATIONS ASSESSMENT.
PUBLISH	Mar 1987. 272 p.
DATE	87/03/00
ABSTRACT	In situ vitrification (ISV) is a process whereby jou immobilizes contaminated soil in place into a durabl crystalline waste form.
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Schwarzkopf, W.; Smalilos, E.; Koester, R.
TYPE	
ORGANIZATION	
TITLE	Kernforschingszentrum Karlsruhe G.M.B.H., Germany, F fuer Nukleare Entsorgungstechnik. IN-SITU CORROSION STUDIES ON SELECTED HIGH-LEVEL WAS MATERIALS UNDER SIMULATED DISPOSAL CONDITIONS IN ROC FORMATIONS.
PUBLISH	January 1988. 19 p.
DATE	88/01/00
ABSTRACT	This work reports about in situ corrosion experiment

KEYWORDS	unalloyed steels, Ti 99, 8-Pd, Hastelloy C4, and iron alloys, as modular cast iron, Ni-resist D4 and Si-ca under simulated disposal conditions.
LOCATION	CONTAINMENT: steel, corrosion.
REFERENCE	
AUTHOR	Moennich, E.
TYPE	govt
ORGANIZATION	
TITLE	IN-SITU VERIFICATION OF PU-CONTAINERS IN LONG-TERM S
PUBLISH	J. Inst. Nuclear Materials Management. V. 13. p. 277
DATE	
ABSTRACT	An integrated system for IAEA safeguards of plutonium in long term storage areas is described. The system to provide fast response at reasonable costs for the identification of any anomaly which may be caused by uncontrolled movement of the containers in the storage
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Hayward, P.J.; Vance, E.R.; Cann, C.D.; George, I.M.
TYPE	S.L.
ORGANIZATION	govt
TITLE	Atomic Energy of Canada Limited.
PUBLISH	INFLUENCE OF HIGHER WASTE LOADING ON CRYSTALLIZATION TITANOSILICATE GLASS-CERAMICS.
DATE	8 p. (1985). Reprinted from Materials Research Society Proceedings 50, Scientific Basis for Nuclear Waste Management IX, p. 347-354, 1985.
ABSTRACT	85/00/00
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Congdon, J.W.
TYPE	
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	INHIBITION OF NUCLEAR WASTE SOLUTIONS CONTAINING MULTICOMPONENT SYSTEMS TESTS AT 200 °C. PART 1: LEACHING OF CESIUM, STRONTIUM AND ACTINIDES.
PUBLISH	1987, 14 p.
DATE	87/00/00
ABSTRACT	The inhibition of localized corrosion of carbon steel in high-level radioactive solutions was studied using cyclic potentiodynamic polarization scans, supplemented by potentiostatic immersed coupon tests.
KEYWORDS	CONTAINMENT: corrosion, chemistry.
LOCATION	
REFERENCE	
AUTHOR	Heimann, R.B.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	INTERACTION OF CEMENT AND RADIOACTIVE WASTE FORMS IN MULTICOMPONENT SYSTEMS TESTS AT 200 °C. PART 1: LEACHING OF CESIUM, STRONTIUM AND ACTINIDES.
PUBLISH	Reprinted from Cement and Concrete Research (1988) 1
DATE	
ABSTRACT	

KEYWORDS	CONTAINMENT: leaching, thermodynamics, cement.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	INVESTIGATIONS ON THE ROLE OF SURFACE LAYERS IN HLW LEACHING.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 203.
DATE	85/09/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass, leaching.
LOCATION	
REFERENCE	
AUTHOR	Smailos, E.; Schwarzkopf, W.; Koester, R.; Storch, W.
TYPE	acad
ORGANIZATION	Kernforschungszentrum Karlsruhe G.M.B.H. (Germany, F)
TITLE	Fuer Nukleare Entsorgungstechnik. INVESTIGATIONS ON THE SUITABILITY OF CERAMIC CONTAIN CORROSION PROTECTION OF HIGH-LEVEL WASTE FORMS DURING IN ROCK SALT FORMATIONS.
PUBLISH	Apr 1987. 84 p.
DATE	87/04/00
ABSTRACT	The suitability has been studied of ceramic containment as long-term corrosion protection for HLW forms under hypothetical accident conditions in a rock salt repository.
KEYWORDS	CONTAINMENT: ceramics, salt, corrosion.
LOCATION	
REFERENCE	
AUTHOR	Morris, J.B.; Hollinrake, A.; Wall, G.P.; Dalton, J. E.L.; Sutcliffe, P.W.; Finch, J.E.; Watson, B.
TYPE	
ORGANIZATION	
TITLE	UKAEA Harwell Lab. Chemical Engineering Div.; Department Environment, London, (UK). JOULE CERAMIC MELTER. ANNUAL REPORT FOR THE PERIOD 1 30 JUNE 1986.
PUBLISH	December 1987. 38 p.
DATE	87/12/00
ABSTRACT	Work has restarted on installing the full-scale joule melter which is to be used to evaluate the JCM process vitrifying fast reactor high-level wastes.
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Swedish Nuclear Fuel and Waste Management Co., Stockholm (Sweden).
TITLE	JSS PROJECT PHASE 4: EXPERIMENTAL AND MODELLING STUDY GLASS DISSOLUTION IN REPOSITORY ENVIRONMENTS. FINAL
PUBLISH	October 1987. 295 p.
DATE	87/10/00
ABSTRACT	A goal of the JSS project was to develop a scientific understanding the effects of waste package component groundwater chemistry, and other repository conditions dissolution behavior, and to develop and refine a model

KEYWORDS	processes governing glass dissolution.
LOCATION	CONTAINMENT: glass, groundwater, chemistry.
REFERENCE	
AUTHOR	Mataloni, P.; Scotti, E. (ENEA, Rome, Italy); Marrocchi, P.; Pietrelli, L. (ENEA, Casaccia, Italy. Centro Francese di Studi e Ricerche sul Rischio Nucleare).
TYPE	
ORGANIZATION	Societe Francaise D'Energie Nucleaire, Paris, (France).
TITLE	LABORATORY AND PILOT PLANT STUDIES FOR THE SOLIDIFICATION OF ALUMINUM RICH HLW PRODUCED BY EUREX PLANT.
PUBLISH	P. 297-313. Recod 87. Nuclear Fuel Reprocessing and Management Vol. 1. Paris, France. Societe Francaise d'Energie Nucleaire. 1987. 492 p.
DATE	87/00/00
ABSTRACT	ENEA started research activities to study a suitable way to fix the radioactive waste in a glass matrix; two main options have been developed: the direct vitrification of the waste with an in-can melting vitrification plant. The second option has been studied in an inactive pilot plant called IRENE. The first option is a declassification option to separate the radioactive waste from the salt matrix, developed on a laboratory scale. The second option is the development of a laboratory scale vitrification process.
KEYWORDS	CONTAINMENT: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Bickford, D.F.; Pellarin, D.J. (E.I. Du Pont de Nemours & Co., Aiken, SC).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	priv
TITLE	Argonne National Lab. IL (USA).
PUBLISH	LARGE SCALE LEACH TESTING OF DWPFD CANISTER SECTIONS. P. 509-518. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987. 492 p.
DATE	87/00/00
ABSTRACT	A large-scale leach test facility (LSLTF) has been constructed at the U.S. Department of Energy's Savannah River Laboratory to perform static leach tests on 24-inch (610 mm)-diameter canister sections cut from simulated (nonradioactive) waste forms cast under reference conditions.
KEYWORDS	CONTAINMENT: leaching.
LOCATION	
REFERENCE	
AUTHOR	Ishida, Masanobu; Yanagi, Tadashi; Terai, Ryohei (Osaka Univ., Suita (Japan). Faculty of Engineering).
TYPE	acad
ORGANIZATION	
TITLE	LEACH RATES OF COMPOSITE WASTE FORMS OF MONAZITE- AND ZIRCONIUM PHOSPHATE-TYPE.
PUBLISH	J. Nucl. Sci. Technol. (Tokyo). (May 1987) 24(5):404-410.
DATE	87/05/00
ABSTRACT	Leaching behaviour of simultaneously synthesized composite waste form of monazite- and zirconium phosphate-type was investigated by making use of simulated high level waste.
KEYWORDS	CONTAINMENT: leaching.
LOCATION	
REFERENCE	
AUTHOR	Kamizono, Hiroshi (Japan Atomic Energy Inst., Tokai, Ibaraki Prefecture).

TYPE	Tokai Research Establishment).
ORGANIZATION	Japan Atomic Energy Research Inst. Tokyo.
TITLE	LEACHING BEHAVIOUR OF SIMULATED HIGH-LEVEL WASTE GLA
PUBLISH	Mar 1987. 21 p.
DATE	87/03/00
ABSTRACT	The author's work in the study on the leaching behav
KEYWORDS	simulated high-level waste (HLW) glass was summarize
LOCATION	CONTAINMENT: leaching, glass.
REFERENCE	
AUTHOR	Hall, A.R. (UKAEA Atomic Energy Research Establishme
TYPE	Chemistry Div.) (ed.)
ORGANIZATION	assoc
TITLE	Commission of the European Communities, Brussels, (B
	LEACHING MECHANISM THEORY.
PUBLISH	P. 12-67. Testing and Evaluation of Solidified High-
DATE	Radioactive Waste. London, UK. Graham and Trotman Lt
ABSTRACT	p. Radioactive Waste Management Series.
KEYWORDS	87/00/00
LOCATION	The topic of this contribution is the determination
REFERENCE	corrosion mechanism of the simulated hlw glass.
	CONTAINMENT: corrosion, glass, leaching.
AUTHOR	Jantzen, C.M.; Bickford, D.F.
TYPE	acad
ORGANIZATION	
TITLE	LEACHING OF DEVITRIFIED GLASS CONTAINING SIMULATED S
PUBLISH	WASTE.
DATE	Materials Research Society Symposia Proceedings 44:
ABSTRACT	85/00/00
KEYWORDS	CONTAINMENT: leaching, glass.
LOCATION	
REFERENCE	
AUTHOR	Okamoto, M.; Chino, K.; Baba, T.; Izumida, T.; Kawam
TYPE	Kikuchi, M. (Kansai Electric Power Co., Osaka, Japan
ORGANIZATION	Bates, J.K.; Seefeldt, W.B. (eds.).
TITLE	priv
PUBLISH	Argonne National Lab. IL (USA).
DATE	LEACHING STUDIES OF CEMENT-GLASS PACKAGE CONTAINING
ABSTRACT	BORATE.
KEYWORDS	P. 393-398. Scientific Basis for Nuclear Waste Manag
LOCATION	Pittsburgh, PA (USA). Materials Research Society. 19
REFERENCE	87/00/00
	A new solidification technique using cement-glass, w
	mixture of sodium silicate, cement, additives, and i
	the solidification reaction, was developed for sodiu
	liquid waste generated from pressurized water reacto
	plants.
	CONTAINMENT: glass, leaching, cement.
AUTHOR	Bancroft, G.M.; Metson, J.B.; Kresovic, R.A.; Nesbit
TYPE	(University of Western Ontario, London).
	acad

ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

GCACA.
LEACHING STUDIES OF NATURAL AND SYNTHETIC TITANITES
SECONDARY ION MASS SPECTROMETRY.
Geochim. Cosmochim. Acta. (Apr 1987) 51(4):911-918.
87/04/00
Titanite has been proposed as the ceramic component
glass-ceramic host for the immobilization of nuclear
reprocessing wastes. Central to this proposal is the

KEYWORDS
LOCATION
REFERENCE

that titanite can be in thermodynamic equilibrium with
of natural groundwaters. In this paper, the authors
experimental evidence for the thermodynamic argument
from SIMS depth profiles .
CONTAINMENT: glass, leaching, ceramics, thermodynamic

AUTHOR
TYPE
ORGANIZATION
TITLE

Hayward, P.J.; Watson, D.G.; McIlwain, A.K.; George,
Mitchell, S.L.
govt
Atomic Energy of Canada Limited.
LEACHING STUDIES OF SPHENE CERAMICS CONTAINING SUBST
RADIONUCLIDES.

PUBLISH

10 p. (1986). Reprinted from Nuclear and Chemical Waste
Management (1986) 6:71-80.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

86/00/00

CONTAINMENT: leaching.

AUTHOR
TYPE
ORGANIZATION
TITLE

Bibler, N.E.; Jurgensen, A.R.
Savannah River Lab. SC (USA).
LEACHING TC-99 FROM SRP GLASS IN SIMULATED TUFF AND
GROUNDWATERS.

PUBLISH
DATE
ABSTRACT

1987. 9 p.
87/00/00
Results of leach tests with TC-99 doped SRP borosilicate
glass are presented. Results indicated that under an
oxidizing conditions TC-99 leached no faster than the
glass-forming elements of the glass.
CONTAINMENT: leaching, glass, tuff.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Boatner, L.A.; Sales, B.C.
govt
U.S. Department of Energy.
LEAD-IRON PHOSPHATE GLASS AS A CONTAINMENT MEDIUM FOR
DISPOSAL OF HIGH-LEVEL NUCLEAR WASTE.

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

1984. 33 p.
84/00/00

Containment:

AUTHOR
TYPE

Rincon, J.M. (Inst. de Ceramica y Vidrio, Madrid, Spain)
Lopez, J.M. (ed.)
acad

ORGANIZATION	Centro de Investigaciones Energeticas, Medioambienta
TITLE	Technologicas, Madrid, (Spain).
PUBLISH	LIQUID INMISCIBILITY IN GLASSES AND NUCLEAR WASTE MA
DATE	P.43-68. Glasses and Glass-Ceramics for Nuclear Wast
ABSTRACT	1987. 212 p.
KEYWORDS	87/00/00
LOCATION	The glass-in-glass phase separation or liquid inmisc
REFERENCE	glasses has been widely investigated in the past due
	applications in glazes, opal glasses and glass-ceram
	CONTAINMENT: glass.
AUTHOR	Yunker, W.H.; Glass, R.S. (Westinghouse Hanford Co.,
TYPE	WA)
ORGANIZATION	Bates, J.K.; Seefeldt, W.B. (eds.)
TITLE	priv
PUBLISH	Argonne National Lab. IL (USA).
DATE	LONG-TERM CORROSION BEHAVIOR OF COPPER-BASE MATERIAL
ABSTRACT	GAMMA-IRRADIATED ENVIRONMENT.
KEYWORDS	P. 579-590. Scientific Basis for Nuclear Waste Manag
LOCATION	Pittsburgh, PA (USA). Materials Research Society. 19
REFERENCE	87/00/00
	The US Department of Energy is currently evaluating
	feasibility of using copper-base minerals for the ma
	nuclear waste containers.
	CONTAINMENT: corrosion.
AUTHOR	Means, J.L.; Spinosa, E.D.; Markworth, A.J.; McCoy,
TYPE	N.E.; Kurth, R.E.; Taylor, G.C.
ORGANIZATION	priv
TITLE	Battelle Columbus Div. OH (USA).
PUBLISH	LONG-TERM PERFORMANCE OF HIGH-LEVEL GLASS WASTE FORM
DATE	REPORT, JUNE 1982-NOVEMBER 1986).
ABSTRACT	November 1987. 173 p.
KEYWORDS	87/11/00
LOCATION	This report investigates the long-term performance o
REFERENCE	used for high-level waste packages. Glass waste-form
	the topic of this report, focussed on borosilicate g
	both defence and commercial wastes.
	CONTAINMENT: glass.
AUTHOR	Stahl, D.; Miller, N.E.
TYPE	govt
ORGANIZATION	Battelle Columbus Labs. OH (USA).
TITLE	LONG-TERM PERFORMANCE OF MATERIALS USED FOR HIGH-LEV
PUBLISH	PACKAGING. ANNUAL REPORT, YEAR THREE, APRIL 1984 - A
	1985. 233 p.

DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Means, J.L.; Markworth, A.J.; Mccoy, J.K.; Failey, J.
TYPE	Stenhouse, M.J.; Kohli, R.; Taylor, G.C.
ORGANIZATION	Battelle Columbus Div. OH; Nuclear Regulatory Commission
TITLE	Washington.
PUBLISH	LONG-TERM PERFORMANCE OF SPENT FUEL WASTE FORMS.
DATE	September 1987. 158 p.
ABSTRACT	87/09/00
KEYWORDS	This report investigates the leaching/dissolution of
LOCATION	of spent fuel in simulated groundwaters.
REFERENCE	CONTAINMENT: leaching, groundwater.
AUTHOR	Pescatore, C.; Sastre, C.
TYPE	govt
ORGANIZATION	Brookhaven National Lab. NY (USA).
TITLE	MASS TRANSFER FROM PENETRATIONS IN WASTE CONTAINERS.
PUBLISH	1987. 10 p.
DATE	87/00/00
ABSTRACT	Recent studies have indicated that localized corrosion
KEYWORDS	relatively small area of a waste container may impact
LOCATION	containment function to such an extent that larger
REFERENCE	be possible that from the bare waste form.
	CONTAINMENT: radionuclide migration, corrosion.
AUTHOR	Chapman, R.L; Sorensen, K.B.
TYPE	priv
ORGANIZATION	EG and G Idaho Co., ID (USA).
TITLE	MATERIALS ISSUES IN CASK DEVELOPMENT.
PUBLISH	1987. 4 p.
DATE	87/00/00
ABSTRACT	The OCRWM sponsored from-reactor cask systems acquisition
KEYWORDS	is developing a family of casks suitable for transport
LOCATION	commercial spent fuel. The program is procuring up to
REFERENCE	designs for further development and eventual licensing
	CONTAINMENT: cask, transport.
AUTHOR	Merz, M.D.; Gerber, F.; Wang, R. (Pacific Northwest
TYPE	Richland, WA).
	Bates, J.K.; Seefeldt, W.B. (eds.).
	priv
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	MCC CORROSION TESTS AT REFERENCE TESTING CONDITIONS
PUBLISH	STEEL IN HANFORD GROUND WATER.
DATE	P. 215-226. Scientific Basis for Nuclear Waste Management
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 19
	87/00/00
	The Materials Characterization Center (MCC) at Pacific
	Laboratory is performing three kinds of corrosion tests
	Basalt Waste Isolation Project (BWIP) to establish test

KEYWORDS	interlaboratory reproducibility and uncertainty of c
LOCATION	rates of container materials for high-level nuclear
REFERENCE	CONTAINMENT: corrosion.
AUTHOR	Elsen, R.; Schlich, M. (Technische Hochschule Aachen, F.R.. Lehrstuhl und Inst. fuer Elektrische Anlagen u Energiewirtschaft).
TYPE	
ORGANIZATION	Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt Gesellschaft E.V., Bonn, Germany, (F.R.).
TITLE	MEASURING NUCLEAR HEAT SOURCES IN MAW-WASTE DRUMS BY CALORIMETRY. (in German)
PUBLISH	P. 449-452. Annual Meeting on Nuclear Technology '87 Proceedings. Session 4: Fuel Cycle and Waste Process
DATE	829 p.
ABSTRACT	87/00/00
KEYWORDS	
LOCATION	CONTAINMENT: thermodynamics.
REFERENCE	
AUTHOR	Francois, Y, Dourthe, M.; Jaouen, C.
TYPE	govt
ORGANIZATION	CEA Centre D'etudes Nucleaires de Fontenay-aux-Roses
TITLE	MECHANICAL BEHAVIOUR OF THE ASBESTOS-CEMENT CONTAINMENT GEOLOGICAL DISPOSAL OF ALPHA LEVEL TECHNOLOGICAL WAS COGEMA REPROCESSING PLANTS.
PUBLISH	March 1987. 8 p.
DATE	87/03/00
ABSTRACT	For the safety assessment of the SGN Asbestos cement concept selected by Cogema for the conditioning of c alpha technological wastes from the UP3-UP2 800 repr plants, a general survey has been carried out to con its confinement capacity and its mechanical strength
KEYWORDS	CONTAINMENT: safety analysis, geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Hall, A.R. (UKAEA Atomic Energy Research Establishme
TYPE	Chemistry Div.) (ed.) assoc
ORGANIZATION	Commission of the European Communities, Brussels, (B
TITLE	MECHANICAL STABILITY.
PUBLISH	P. 320-330. Testing and Evaluation of Solidified Hig Radioactive Waste. London, UK. Graham and Trotman Lt p. Radioactive Waste Management Series.
DATE	87/00/00
ABSTRACT	Critical stresses were measured for a series of glas containing simulated hlw. A soda-lime glass was test comparison. Fracture stresses, fracture toughness an growth were measured and the data evaluated.
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Mathew, P.M.; Krueger, P.A. (Atomic Energy of Canada Pinawa, Manitoba).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.). govt

ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Argonne National Lab. Il (USA).
METAL-MATRIX CORROSION STUDIES IN CANADIAN SHIELD G
GROUNDWATERS.

P. 261-270. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00

The Canadian Nuclear Fuel Waste Management Program
two basic supported-shell container concepts for use
immobilization. One concept uses a compacted particu
material within the container to support a thin,
corrosion-resistant shell. The other concept, called
metal-matrix concept, uses a cast-in-place metal mat
shell support. This paper describes corrosion studie
candidate matrix materials.

CONTAINMENT: corrosion, granite, groundwater.

Fayer, M.J.

priv

Pacific Northwest Lab. WA (USA).

MODEL ASSESSMENT OF PROTECTIVE BARRIER DESIGNS: PART
November 1987. 52 p.

87/11/00

Protective barriers are being considered for use at
site to enhance the isolation of radioactive wastes
plant and animal intrusion. This study assesses the
effectiveness of protective barriers for isolation o
from water. In this report, barrier designs are revi
several barrier modelling assumptions are tested.

CONTAINMENT: design, modelling.

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE

Grambow, B.; Zwicky, H.U.; Bart, G.; Bjoerner, I.K.;
(Hahn-Meitner-Institut Berlin, West Germany).
Bates, J.K.; Seefeldt, W.B. (eds.).

acad

Argonne National Lab. Il (USA).

MODELING OF THE EFFECT OF IRON CORROSION PRODUCTS ON
WASTE GLASS PERFORMANCE.

P. 471-481. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00

Experiments performed in the frame of the JSS-Projec
Japanese (CRIEPI), Swiss (NAGRA), Swedish (SKB) Proj
demonstrated that the effect of iron corrosion produ
long-term stability of HLW-glass depends on the effe
surface area of the corrosion products.

CONTAINMENT: corrosion, glass.

Walton, J.C.; Sagar, B.

MODELLING PERFORMANCE OF STEEL CONTAINERS IN HIGH-LE
REPOSITORY ENVIRONMENTS: IMPLICATIONS FOR WASTE ISOL
Radioact. Waste Manage. Nucl. Fuel Cycle. March 1988
323-347.

88/05/00

ABSTRACT	The concept explored is one in which a substantial c allowance is provided in design leading to a relativ thick-walled container.
KEYWORDS	CONTAINMENT: steel, modelling, corrosion.
LOCATION	
REFERENCE	
AUTHOR	Heimann, R.B. (Atomic Energy of Canada Ltd., Pinawa, Bates, J.K.; Seefeldt, W.B. (eds.).
TYPE	govt
ORGANIZATION	Argonne National Lab. Il (USA).
TITLE	MULTICOMPONENT SYSTEMS TESTS ON USED FUEL AND FUEL R GLASS AT 2000°C.
PUBLISH	P. 409-420. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	Experiments were performed at 2000°C and 8.5 MPA on a borosilicate waste glass in contact with clay, con metals, groundwater and granite selected as referenc in the Canadian Nuclear Fuel Waste Management Progra
KEYWORDS	CONTAINMENT: granite, groundwater, glass.
LOCATION	
REFERENCE	
AUTHOR	Ewing, R.C.; Jercinovic, M.J. (Univ. of New Mexico)
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	

PUBLISH	MATERIALS?
DATE	6 p. (1986). Reprinted from Glass Technology (1986)
ABSTRACT	86/00/00
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	NUCLEAR SCIENCE AND TECHNOLOGY: DESIGN STUDY ON CONT
	GEOLOGICAL DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE.
PUBLISH	Ove Arup & Partners, London, 1985. 86 p.
DATE	85/00/00
ABSTRACT	

KEYWORDS	CONTAINMENT: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Jantzen, C.M.
TYPE	priv
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	NUCLEAR WASTE GLASS CORROSION MECHANISMS.
PUBLISH	April 1987. 52 p.
DATE	87/04/00
ABSTRACT	Dissolution of nuclear waste glass occurs by corrosion similar to those of other solids. The effects of imp oxidation potential conditions existing in natural e on glass dissolution is described in the context of diagrams, pH potential diagrams, for glass.
	CONTAINMENT: glass, corrosion.

KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Pfeiffer, P.A.; Kennedy, J.M.
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	NUCLEAR WASTE PACKAGE FABRICATED FROM CONCRETE.
PUBLISH	March 1987. 6 p.
DATE	87/03/00
ABSTRACT	The main concern of this site, is contamination of t groundwater by release of radionuclides from the was The containment barriers are the primary waste conta structural materials and are intended to provide con the nuclear waste up to a thousand years.
	CONTAINMENT: concrete.

KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Pfeiffer, P.A.; Kennedy, J.M. (Argonne National Lab.
	Wittman, F.H. (ed.).
TYPE	govt
ORGANIZATION	
TITLE	NUCLEAR WASTE PACKAGE FABRICATED FROM CONCRETE. (HAN
PUBLISH	P. 215-220. Transactions of the 9th International Co
	Structural Mechanics in Reactor Technology. Vol. H.
	Concrete Structures. Rotterdam (Netherlands). Balkem
	p.
DATE	87/00/00
ABSTRACT	A 12 in. thick container gives a maximum compressive

KEYWORDS	about 3400 PSI and a maximum tensile stress of about
LOCATION	CONTAINMENT: concrete.
REFERENCE	
AUTHOR	Liu, D.; Piercy, G.R.; Purdy, G.R.; Hayward, P.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	NUCLEATION OF SPHENE IN GLASS CERAMICS FOR THE IMMOB
	NUCLEAR WASTE.
PUBLISH	11 p. (1985). Reprinted from Physics and Chemistry o
	(1985) 26(6).
DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass, ceramics.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	OPTIMIZATION OF CONCRETE CONTAINER COMPOSITION IN RA
	WASTE MANAGEMENT.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede
	9-11, 1985. p. 469.
DATE	85/09/00
ABSTRACT	
KEYWORDS	CONTAINMENT: concrete.
LOCATION	
REFERENCE	
AUTHOR	Hall, A.R. (UKAEA Atomic Energy Research Establishme
	Chemistry Div.) (ed.)
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Brussels, (B
TITLE	PARAMETRIC STUDY OF CORROSION STABLILITY.
PUBLISH	P. 173-275. Testing and Evaluation of Solidified Hig
	Radioactive Waste. London, UK. Graham and Trotman Lt
	p. Radioactive Waste Management Series.
DATE	87/00/00
ABSTRACT	Three studies on simulated waste glasses are reporte
	Characterization of simulated highly active waste fo
	including corrosion and leaching, effect of temperat
	corrosion in clay media, leaching of americium from
	an experimental study of the influence of various pa
	aqueous leach rates of radioactive glass are describ
KEYWORDS	CONTAINMENT: glass, corrosion, leaching.
LOCATION	
REFERENCE	
AUTHOR	Solomah, A.G.; Richardson, P.G.; McIlwain, A.K.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	PHASE IDENTIFICATION, MICROSTRUCTURAL CHARACTERIZATI
	MICROANALYSES AND LEACHING PERFORMANCE EVALUATION OF
	CRYSTALLINE CERAMIC WASTE FORM.
PUBLISH	9 p. (1987). Reprinted from Journal of Nuclear Mater
	148:157-165.
DATE	87/00/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: leaching.

AUTHOR
TYPE
ORGANIZATION
TITLE

Aines, R.D.
govt
Lawrence Livermore National Lab. CA (USA).
PLAN FOR GLASS WASTE FORM TESTING FOR NNWSI (NEVADA
STORAGE INVESTIGATIONS)

PUBLISH
DATE
ABSTRACT

September 1987. 33 p.
87/09/00
The purpose of glass waste form testing is to deter
of release of radionuclides from the breached glass
containers.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: radionuclide migration, glass.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Ratigan, J.L. (RE/SPEC Inc., Rapid City, SD)
Pacific Northwest Lab. WA (USA).
POST EMPLACEMENT CONDITIONS IN THE VERY-NEAR FIELD.
Proceedings of Salt Repository Project's Workshop on
Migration. March 1987, p.15, Appendix/C.37-C.46.

DATE
ABSTRACT

87/03/00
Emplacement of a radioactive waste package in a bore
floor of an underground drift in salt will increase
and mean stress in the near vicinity of the waste p
eventual temperature rise in the waste package will
package spacing among other things.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: salt.

AUTHOR
TYPE
ORGANIZATION

Gahlert, S.
Kernforschungszentrum Karlsruhe G.M.B.H., Germany, I
fuer Material und Festkoeperforschung.

TITLE

POWDER TECHNOLOGICAL VITRIFICATION OF SIMULATED HIGH
(in German)

PUBLISH
DATE
ABSTRACT

March 1988. 212 p.
88/03/00
High-level waste simulate from the reprocessing of 1
reactor and fast breeder fuel was vitrified by powde
technology.

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: glass.

AUTHOR

Gahlert, S.; Adelhelm, C.; Ondracek, G. (Kernforschun
Karlsruhe G.M.B.H., Germany, F.R., Inst. fuer Materi

|Festkoeperforschung).

TYPE	
ORGANIZATION	Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt Gesellschaft E.V., Bonn, Germany, (F.R.).
TITLE	POWDER TECHNOLOGY VITRIFICATION OF HIGH-LEVEL RADIOA FROM FBR AND LWR REPROCESSING.
PUBLISH	P. 445-448. Annual Meeting on Nuclear Technology '87 Proceedings. Session 4: Fuel Cycle and Waste Process
DATE	829 p.
ABSTRACT	87/00/00
KEYWORDS	CONTAINMENT: glass, reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Nappravnik, J.; Sazavsky, P.; Skaba, V.; Zahalka, F.
TYPE	assoc
ORGANIZATION	
TITLE	PRACTICAL RESULTS OF THE MESA 1 LINE CALCINATOR TRIA
PUBLISH	Nukleon, 1987. p. 3-6.
DATE	87/00/00
ABSTRACT	MESA 1, a mobile calcination and cementation unit, i fixate liquid radioactive wastes. Several experiment performed on model non-radioactive wastes.
KEYWORDS	CONTAINMENT: volume reduction, cement.
LOCATION	
REFERENCE	
AUTHOR	O'Neal, W.C.
TYPE	govt
ORGANIZATION	
TITLE	PRECLOSURE ANALYSIS OF CONCEPTUAL WASTE PACKAGE DESI NUCLEAR REPOSITORY IN TUFF.
PUBLISH	LLNL Report UCRL 53595. Nov. 1, 1984. 68 p.
DATE	84/11/01
ABSTRACT	LLNL is developing waste package designs to meet NRC for disposal of radioactive wastes in a tuff reposit Mountain. Nuclear criticality safety analysis of con designs, thermal analysis, and structural analysis a discussed.
KEYWORDS	CONTAINMENT: safety analysis, design.
LOCATION	
REFERENCE	
AUTHOR	Jantzen, C.M.
TYPE	acad
ORGANIZATION	
TITLE	PREDICTION OF NUCLEAR WASTE GLASS DURABILITY FROM NA ANALOGUES.
PUBLISH	Advances in Ceramics 20 : (In press)
DATE	89/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass, natural analogues.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	PRELIMINARY ASSESSMENT OF REMOTE HANDLING OF THE THI PARTICULATE-PACKED CONTAINER.
PUBLISH	1986. 68 p.

DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: waste handling and emplacement.
LOCATION	
REFERENCE	
AUTHOR	Aubert, B.
TYPE	
ORGANIZATION	Societe Generale pour les Techniques Nouvelles, St.-Quetin-en-Yvelines, (France).
TITLE	PROCESS FOR IMMOBILIZATION OF NUCLEAR WASTES IN A B GLASS. (in French)
PUBLISH	9 October 1987; 8 April 1986. 22 p.
DATE	87/10/09
ABSTRACT	In this process are mixed: a silica based gel precu concentrated aqueous solution of a boron compound an concentrated aqueous solutions of other components c glass.
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Knoechel, A.; Carboo, D.
TYPE	
ORGANIZATION	Kernforschungszentrum Karlesruhe G.M.B.H., Germany, PROCESS FOR SOLIDFYING TRITIUM FROM LIQUIDS CONTAIN German)
TITLE	
PUBLISH	11 June 1987; 7 December 1985. 15 p.
DATE	87/06/11
ABSTRACT	The purpose of the invention is to create a process solidifying tritium from liquids containing HTO, in solidification products are obtained which on the o a relatively high resistance to leaching and on the permit a relatively high loading with radioactive t together with a simple process and low costs of appa CONTAINMENT: glass, leaching.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Landles, A.J.; Awmack, A.F.; Baxter, W. (British Nuc Ltd., Sellafield).
TYPE	govt
ORGANIZATION	Department of the Environment. London (UK).
TITLE	PROGRESS ON IMMOBILISATION OF PLUTONIUM RESIDUES ANI PLUTONIUM CONTAMINATED MATERIALS IN CEMENT.
PUBLISH	Mar 1987. 19 p.
DATE	87/03/00
ABSTRACT	Laboratory scale experiments have been carried out t feasibility of encapsulating plutonium contaminated cement.
KEYWORDS	CONTAINMENT: cement.
LOCATION	
REFERENCE	
AUTHOR	McCright, R.D.; Halsey, W.G.; Van Konynenburg, R.A.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA (USA).
TITLE	PROGRESS REPORT ON THE RESULTS OF TESTING ADVANCED C DESIGN METAL BARRIER MATERIALS UNDER RELEVANT ENVIRC CONDITIONS FOR A TUFF REPOSITORY.
PUBLISH	December 1987. 114 p.

DATE	87/12/00
ABSTRACT	This report discusses the performance of candidate materials envisioned for fabricating waste package c for long-term disposal at a possible geological repository at Yucca Mountain, Nevada.
KEYWORDS	CONTAINMENT: tuff.
LOCATION	
REFERENCE	
AUTHOR	Maerk, T.D.; Ritter, W. (Institut fuer Experimentalphysik Innsbruck, Austria)
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.)
ORGANIZATION	acad
TITLE	Argonne National Lab. IL (USA).
PUBLISH	RADIATION DAMAGE AND ITS ANNEALING IN SODIUM SILICA
DATE	P. 659-669. Scientific Basis for Nuclear Waste Management
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
KEYWORDS	Annealing of radiation damage in artificial sodium silicate has been studied by absorption spectroscopy for different radiation sources as a function of annealing time and temperature.
LOCATION	CONTAINMENT: glass.
REFERENCE	
AUTHOR	Denatale, J.F. (California Univ., Davis. Dept. of Mechanical Engineering)
TYPE	Rincon Lopez, J.M. (ed.)
ORGANIZATION	Centro de Investigaciones Energeticas, Medioambientales y Tecnologicas, Madrid, (Spain).
TITLE	RADIATION DAMAGE IN NUCLEAR WASTE GLASS.
PUBLISH	
DATE	P.179-208. Glasses and Glass Ceramics for Nuclear Waste Management. 1987. 212 p.
ABSTRACT	87/00/00
KEYWORDS	Silicate glass is a promising material for the containment of nuclear wastes. The need for an accurate characterization of waste properties makes an understanding of the radiation effects on the glass an important issue.
LOCATION	CONTAINMENT: glass, waste characterization.
REFERENCE	
AUTHOR	Weber, W.J.
TYPE	govt
ORGANIZATION	Battelle Pacific Northwest Lab. WA (USA).
TITLE	RADIATION EFFECTS ON NUCLEAR WASTE STORAGE MATERIALS
PUBLISH	Nuclear Instruments & Methods in Physics Research. F229(2-3). p. 527-534.
DATE	84/02/00
ABSTRACT	The self-radiation of packaged radioactive waste materials is addressed. The effects of self-radiation damage resulting in swelling and enhanced leaching of the host material are discussed. These effects are minimal in glass but are more pronounced in crystalline forms. As a result of radiation, free radicals and molecular species that can alter the repository environment are formed.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	Paddock, R.A.; Lerman, A.; Ditmars, J.D.; Macdonald, Peerenboom, J.P.; Was, G.S.; Harrison, W.
TYPE	govt
ORGANIZATION	Argonne National Lab. TN (USA).
TITLE	RADIOACTIVE WASTE ISOLATION IN SALT: PEER REVIEW OF NUCLEAR WASTE ISOLATION'S DRAFT REPORT ON A MULTIFAC
PUBLISH	DESIGN TO INVESTIGATE UNIFORM CORROSION OF LOW-CARBON
DATE	January 1987. 85 p.
ABSTRACT	87/01/00 The several major areas of concern identified by panelists are important to the credibility of the technology proposed in the memorandum and are to be adequately addressed there.
KEYWORDS	CONTAINMENT: corrosion, salt.
LOCATION	
REFERENCE	

AUTHOR	Nelson, R.E.; Ziegler, A.A.; Serino, D.F.; Basnar, I.
TYPE	priv
ORGANIZATION	Rockwell International Corp. WA (USA).
TITLE	RADIOACTIVE WASTE PROCESSING APPARATUS.
PUBLISH	19 May 1987. Vp.
DATE	87/05/19

ABSTRACT	This patent describes an apparatus for use in processing radioactive waste materials for storage in solid form in a container having a substantially cylindrical wall.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	Alexander, W.A.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	RCRA (RESOURCE CONSERVATION AND RECOVERY ACT) WASTE LEAD.
PUBLISH	1987. 9 p.
DATE	87/00/00
ABSTRACT	Lead, a high-density material, is a very effective shield against gamma radiation and has been utilized extensively at the association with radioisotope production and nuclear waste.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	Oversby, V.M.
TYPE	govt
ORGANIZATION	
TITLE	REFERENCE WASTE FORMS AND PACKING MATERIALS FOR THE NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT.
PUBLISH	LLNL Report UCRL-5351, March 30, 1984. 29 p.
DATE	84/03/30
ABSTRACT	Waste packages are being designed for three waste forms to support of the Nevada Nuclear Waste Storage Investigations Project. These are: LWR spent fuel, either as intact or as consolidated fuel pins; reprocessed commercial waste in the form of borosilicate glass; and reprocessed high-level waste.
KEYWORDS	CONTAINMENT: design.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	govt
ORGANIZATION	
TITLE	REFERENCE WASTE PACKAGE ENVIRONMENT REPORT.
PUBLISH	LLNL Report UCRL-53726. October 1, 1986. 31 p.
DATE	86/10/01
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Scott, D.W.; Moore, T.L.; Funnell, G.J.; Schiffhauer (Rockwell Hanford Operations, Richland, WA) Post, R.G. (ed.)
TYPE	
ORGANIZATION	
TITLE	REMOTE INSTALLATION OF A NEW RISER ON AN EXISTING WE SITE TANK.
PUBLISH	P. 435-440. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	A method of remotely installing new access ports, ri existing high level radioactive tanks has been devel Rockwell Hanford operations for use on two of the st at the West Valley demonstration project.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Claiborne, H.C.; Croff, A.G.; Griess, J.C.; Smith, F
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	REPOSITORY ENVIRONMENTAL PARAMETERS AND MODELS/METHO RELEVANT TO ASSESSING THE PERFORMANCE OF HIGH-LEVEL PACKAGES IN BASALT, TUFF, AND SALT.
PUBLISH	September 1987. 244 p.
DATE	87/09/00
ABSTRACT	This document provides specifications for models/met that could be employed in determining post-closure r environmental parameters relevant to the performance high-level waste packages for various disposal proje
KEYWORDS	CONTAINMENT: modelling, basalt, tuff, salt.
LOCATION	
REFERENCE	
AUTHOR	Sullivan, T., et al.
TYPE	govt
ORGANIZATION	Brookhaven National Lab. NY (USA).
TITLE	REVIEW OF DOE WASTE PACKAGE PROGRAM: SEMIANNUAL REPO THE PERIOD APRIL 1985 - SEPTEMBER 1985.
PUBLISH	Technical Report. 100 p.
DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Hayward, P.J.
TYPE	govt

ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	REVIEW OF PROGRESS IN THE DEVELOPMENT OF SPHENE-BASIS GLASS-CERAMICS.
PUBLISH	8 p. (1985). Reprinted from Materials Research Society Proceedings 50, Scientific Basis for Nuclear Waste Management IX, p. 355-362, 1985.

DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: glass, ceramics.
LOCATION	
REFERENCE	

AUTHOR	Coles, D.G.; Peters, R.D.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	SCALE-UP CONSIDERATIONS RELEVANT TO EXPERIMENTAL STUDIES OF NUCLEAR WASTE-PACKAGE BEHAVIOUR.
PUBLISH	1986. 157 p.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR	Bates, J.K.; Seefeldt, W.B. (eds.).
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	SCIENTIFIC BASIS FOR NUCLEAR WASTE MANAGEMENT X: MATERIALS RESEARCH SOCIETY SYMPOSIA PROCEEDINGS, VOLUME 84.
PUBLISH	Pittsburgh, PA (USA). Materials Research Society. 1987.
DATE	87/00/00
ABSTRACT	This book presents the papers given at a symposium on nuclear waste management.
KEYWORDS	CONTAINMENT: corrosion, glass, groundwater, chemistry.
LOCATION	
REFERENCE	

AUTHOR	Filippi, A.M.; Sprecace, R.P.
TYPE	priv
ORGANIZATION	US Commissioner of Patents, Washington, DC (USA).
TITLE	SEAL WELDED CAST IRON NUCLEAR WASTE CONTAINER.
PUBLISH	20 Oct. 1987. VP.
DATE	87/10/20
ABSTRACT	An article of manufacture is described comprising a container having an opening at one end and a cast iron plug at the other.
KEYWORDS	CONTAINMENT: design.
LOCATION	
REFERENCE	

AUTHOR	Oliver, D.L.R. (Mechanical Engineering Dept., Univ. of Ohio)
TYPE	Post, R.G. (ed.)
ORGANIZATION	acad
TITLE	SENSITIVITY OF PERFORMANCE ASSESSMENT OF THE ENGINEER TO NUANCES OF RELEASE RATE CRITERIA.
PUBLISH	P. 131-136. Waste Management '87: Waste Isolation in

DATE	Technical Programs, and Public Education. Tucson, AZ
ABSTRACT	of Arizona Nuclear Engineering Dept. 1987.
	87/00/00
KEYWORDS	The United States Nuclear Regulatory Commission has
LOCATION	criteria for the long-term performance of proposed h
REFERENCE	waste repositories.
	CONTAINMENT: radionuclide migration, regulations.
AUTHOR	Bucholz, J.A. (Oak Ridge National Lab., TN).
TYPE	govt
ORGANIZATION	
TITLE	SHIELDING METHODS FOR EVALUATING THE VERSATILITY OF
PUBLISH	SHIPPING CASKS.
DATE	Trans. Am. Nucl. Soc. 1987. V. 54 P. 296-298.
ABSTRACT	87/00/00
	The paper shows some of the results corresponding to
KEYWORDS	hypothetical cask containing 21 pressurized waste re
LOCATION	assemblies.
REFERENCE	CONTAINMENT:
AUTHOR	Carnahan, C.L.
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	SIMULATION OF EFFECTS OF REDOX AND PRECIPITATION ON
PUBLISH	URANIUM SOLUTION SPECIES IN BACKFILL.
DATE	December 1987. 12 p.
ABSTRACT	87/12/00
	This investigation addresses the problem of predicti
KEYWORDS	rate of migration of redox-sensitive solution specie
LOCATION	packing and backfill materials under conditions of v
REFERENCE	oxidation potential.
	CONTAINMENT: backfill.
AUTHOR	Weber, W.J.; Maupin, G.D.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	SIMULATION OF RADIATION DAMAGE IN ZIRCON.
PUBLISH	June 1987. 17 p.
DATE	87/06/00
ABSTRACT	Radiation damage in natural zircon materials due to
	has been simulated in lab. studies using Pu-doped sy
KEYWORDS	zircon. These studies confirm that lab. testing can
	predict the radiation-damage behavior of radioactive
	over geologic time, and also provide new insights in
	interpretation of radiation damage in natural minera
	CONTAINMENT:
LOCATION	
REFERENCE	

AUTHOR Reimus, T.W.; Kuhn, W.L.
TYPE priv
ORGANIZATION Pacific Northwest Lab. WA (USA).
TITLE SIMULATION USED TO QUALIFY NUCLEAR WASTE GLASS FOR
PUBLISH July 1987. 10 p.
DATE 87/07/00
ABSTRACT This work demonstrates that simulation techniques c
assist in qualifying nuclear waste glass for dispos
CONTAINMENT: glass.

KEYWORDS
LOCATION
REFERENCE
AUTHOR Vance, E.R.
TYPE govt
ORGANIZATION Atomic Energy of Canada Limited.
TITLE SOL-GEL PRODUCTION OF TITANOSILICATE GLASS-CERAMICS
WASTE IMMOBILIZATION.
PUBLISH 4 p. (1986). Reprinted from Journal of Materials Sc
21:1413-1416.
DATE 86/00/00
ABSTRACT
KEYWORDS CONTAINMENT: glass.
LOCATION
REFERENCE

AUTHOR Kunz, W.; Gelfort, E.; Gruenthaler, K.H.; Baukal, W
TYPE
ORGANIZATION Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kern
Gesellschaft E.V., Bonn, Germany, (F.R.).
TITLE SOLIDIFICATION OF TRITIUM-CONTAINING WATERS ON A TE
FOR THE PRODUCTION OF HOOPS FOR FINAL STORAGE. PT.1
CONCEPT, MATERIALS SELECTION, STATUS OF THE PROJECT
P. 461-464. Annual Meeting on Nuclear Technology '8
Proceedings. Session 4: Fuel Cycle and Waste Proces
829 p.
DATE 87/00/00
ABSTRACT
KEYWORDS CONTAINMENT:
LOCATION
REFERENCE

AUTHOR Taylor, P.
TYPE govt
ORGANIZATION Atomic Energy of Canada Limited.
TITLE SOLUBILITY AND STABILITY OF INORGANIC CARBONATES: A
THE SELECTION OF A WASTE FORM FOR CARBON-14.
PUBLISH 1987. 52 p.
DATE 87/00/00
ABSTRACT

KEYWORDS
LOCATION CONTAINMENT:
REFERENCE

AUTHOR Serne, R.J.; Treat, R.L.
TYPE priv
ORGANIZATION Pacific Northwest Lab. WA (USA).
TITLE SOLUBILITY CONSTRAINT CONCEPTS APPLIED TO LEACH TEST
FORMS.
PUBLISH April 1987. 6 p.; p. 28-31. 194 National Meeting of
Chemical Society, Division of Environmental Chemistr

DATE	Washington, DC. American Chemical Society. 1987.
ABSTRACT	87/04/00 Much current activity is devoted to the attempt to e governing processes that control the leaching of sol forms that are destined for burial in geologic media
KEYWORDS	CONTAINMENT: leaching.
LOCATION	
REFERENCE	
AUTHOR	Neretnieks, I.
TYPE	acad
ORGANIZATION	
TITLE	SOME ASPECTS ON THE USE OF IRON CANISTERS FOR HLW.
PUBLISH	Materials Research Society Symposia Proceedings 50:
DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Wilson, C.N.
TYPE	priv/govt
ORGANIZATION	Westinghouse Hanford Co. WA (USA).
TITLE	SPENT FUEL CLADDING CONTAINMENT CREDIT TESTS (WASTE PROGRAMS, HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 569-573.
DATE	84/03/00
ABSTRACT	Test being performed to assess the effectiveness of cladding as a barrier to radionuclide release from s rods stored in a geologic repository are discussed.
KEYWORDS	CONTAINMENT: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Clark, D.E.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	SRP MATERIALS TESTING INFORMATION AND DATA NEEDS.
PUBLISH	Proceedings of Salt Repository Project's workshop on Migration. March 1987, p. 19-21
DATE	87/03/00
ABSTRACT	An advantage of a salt repository is its dryness, wi fluids available for interactions with emplaced wast The fluids that are present in salt are aggressive t of the waste package components.
KEYWORDS	CONTAINMENT: corrosion, salt.
LOCATION	
REFERENCE	
AUTHOR	Knabenschuh, J.L. (Westinghouse Electric Corp., West
TYPE	priv
ORGANIZATION	Societe Francaise D'Energie Nucleaire, Paris, (Franc
TITLE	STARTUP OF THE WEST VALLEY HIGH-LEVEL WASTE CONDITIO VITRIFICATION SYSTEMS.
PUBLISH	P. 263-276. RECOD '87. Nuclear Fuel Reprocessing and Management Vol. 1. Paris, France. Societe Francaise Nucleaire. 1987. 492 p.
DATE	87/00/00
ABSTRACT	The West Valley demonstration project, a federally m cleanup project under the direction of the US DOE ,

KEYWORDS
LOCATION
REFERENCE

in the final stages of installation and testing of the pretreatment of high-level radioactive waste. CONTAINMENT: glass, monitoring.

AUTHOR

Coons, W.; Bergstroem, A.; Gnirk, P.; Gray, M.; Knecht, R.; Pusch, R.; Steadman, J.; Stillborg, B.; Tokonami, M.

TYPE
ORGANIZATION
TITLE

Swedish Nuclear Fuel and Waste Management Co., Stockholm. STATE-OF-THE-ART REPORT ON POTENTIALLY USEFUL MATERIALS FOR SEALING NUCLEAR WASTE REPOSITORIES.

PUBLISH
DATE
ABSTRACT

June 1987. 181 p.
87/06/00
Seals, including fracture seals, may be used to limit flow into and away and to limit the releases of radionuclides that may be transported by groundwater movement. CONTAINMENT: groundwater, radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

acad
STATIC LEACHING OF FULLY RADIOACTIVE WASTE GLASS AT THE PRESENCE OF BENTONITE, GRANITE, AND STAINLESS STEEL PRODUCTS. Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 179.
85/09/00

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

CONTAINMENT: leaching, corrosion.

AUTHOR

McNeil, M.B. (Nuclear Regulatory Commission, Washington, D.C.); Bates, J.K.; Seefeldt, W.B. (eds.).

TYPE
ORGANIZATION
TITLE
PUBLISH

govt
Argonne National Lab. IL (USA).
STATISTICAL ISSUES IN PITTING CORROSION OF CARBON STEEL. P. 199-214. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987/00/00

DATE
ABSTRACT

A review is given of the state of understanding of the statistical distributions of pit depths and pit populations on carbon steel, with special reference to underground structures, which appear to bear significant similarities to waste repositories. CONTAINMENT: corrosion, steel.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

govt
STEADY-STATE AND TRANSIENT RADIONUCLIDE TRANSPORT THROUGH PENETRATIONS IN NUCLEAR WASTE CONTAINERS. LBNL Report 21806, July 1986. 41 p.
86/07/00

PUBLISH
DATE

ABSTRACT	
KEYWORDS	CONTAINMENT: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Beavers, J.A.; Thompson, N.G.; Parkins, R.N.
TYPE	govt
ORGANIZATION	Battelle Columbus Div. OH (USA); Nuclear Regulatory Washington, DC (USA).
TITLE	STRESS-CORROSION CRACKING OF LOW-STRENGTH CARBON STEEL CANDIDATE HIGH-LEVEL WASTE REPOSITORY ENVIRONMENTS.
PUBLISH	Feb 1987. 83 p.
DATE	87/02/00
ABSTRACT	A survey of the literature was performed to identify stress-corrosion cracking agents for low-strength carbon alloy steels in repository environments.
KEYWORDS	CONTAINMENT: corrosion, steel.
LOCATION	
REFERENCE	
AUTHOR	Barrett, N.T.; Antonini, G.M.; Thornley, F.R.; Greav Manara, A. (Joint Research Centre, Ispra, Italy) Bates, J.K.; Seefeldt, W.B. (eds.)
TYPE	
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	STRUCTURAL CHANGES AROUND URANIUM AT THE SURFACE OF CAUSED BY LEACHING.
PUBLISH	P. 571-576. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	Structural changes occurring at the surface of leached borosilicate glasses containing 3%WT of uranium have investigated using fluorescence exafs spectroscopy a incidence.
KEYWORDS	CONTAINMENT: leaching, glass.
LOCATION	
REFERENCE	
AUTHOR	Gates, W.E.
TYPE	priv
ORGANIZATION	West Valley Nuclear Services Co. Inc. NY (USA).
TITLE	STS (SUPERNATANT TREATMENT SYSTEM) CONFINEMENT BARRIER REVIEW FOR THE WEST VALLEY DEMONSTRATION PROJECT.
PUBLISH	June 1987. 109 p.
DATE	87/06/00
ABSTRACT	The primary supernatant treatment system confinement have sufficient reserve capacity due to the inherent factors associated with this type of construction, the extreme environmental loading without structural failure leakage of high-level wastes into the environment.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Philip, J.C.; Christofi, N.; West, J.M.
TYPE	assoc
ORGANIZATION	British Geological Survey. (UK).
TITLE	STUDIES ON THE EFFECTS OF SULPHATE-REDUCING BACTERIA CARBON STEEL RELEVANT TO RADIOACTIVE WASTE DISPOSAL
PUBLISH	1987. 62 p.
DATE	87/00/00

ABSTRACT	Sulphate reducing bacteria have been used to determine maximum effect on mild carbon steel of relevance to disposal.
KEYWORDS	CONTAINMENT: corrosion, chemistry.
LOCATION	
REFERENCE	
AUTHOR	Schreiber, H.D.; Kozak, S.J.; Leonhard, P.G.; McManus
TYPE	Schreiber, C.W. (Virginia Military Inst., Lexington, Glass Chemistry)
ORGANIZATION	acad
TITLE	SULFUR CHEMISTRY IN A BOROSILICATE MELT, PT. 2. KINETIC PROPERTIES.
PUBLISH DATE	Glasech. Ber. January 1988. V.61(1) P. 5-11.
ABSTRACT	88/01/00 The diffusion of gaseous sulfur compounds under both oxidizing and reducing conditions has been determined in compounds under consideration for nuclear waste immobilization.
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Gilliam, T.M.; Mcdaniel, E.W.; Dole, L.R.; Friedman, J.; Loflin, J.A.; Mattus, A.J.; Morgan, I.L.; Tallent, O.G.A.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	SUMMARY REPORT ON THE DEVELOPMENT OF A CEMENT-BASED IMMOBILIZE HANFORD FACILITY WASTE.
PUBLISH DATE	September 1987. 168 p.
ABSTRACT	87/09/00 This report recommends a cement-based grout formula for waste in the transportable grout facility.
KEYWORDS	CONTAINMENT: cement.
LOCATION	
REFERENCE	
AUTHOR	Nicolosi, S.L.; Kurth, R.E.; Quayle, S.F.; Hess, D.J.
TYPE	A.J.
ORGANIZATION	govt
TITLE	Battelle Columbus Div. OH; Nuclear Regulatory Commission
PUBLISH DATE	Washington, DC, (USA).
ABSTRACT	SYSTEM PERFORMANCE OF HIGH-LEVEL WASTE PACKAGE COMPOSITION Sept 1987. 282 p.
KEYWORDS	87/09/00 This report presents analytical and experimental studies to describe the performance of nuclear waste packages at a low
LOCATION	level.
REFERENCE	CONTAINMENT: analytical techniques.
AUTHOR	Jantzen, C.M.
TYPE	acad
ORGANIZATION	
TITLE	SYSTEMS APPROACH TO NUCLEAR WASTE GLASS DEVELOPMENT.
PUBLISH DATE	Journal of Non-Crystalline Solids 84: 215-225.
ABSTRACT	86/00/00
KEYWORDS	CONTAINMENT: glass.

LOCATION
REFERENCE

AUTHOR
TYPE

| Hayward, P.J.; Tait, J.C.; Devgun, J.S.
| govt

ORGANIZATION
TITLE

| Atomic Energy of Canada Limited.
| TECHNOLOGIES FOR THE CONTAINMENT, IMMOBILIZATION AND
| RADIOACTIVE WASTES.

PUBLISH
DATE

| 1987. 32 p.
| 87/00/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

| CONTAINMENT: disposal and storage alternatives.

AUTHOR
TYPE
ORGANIZATION
TITLE

| priv/govt
| Ontario Hydro. (Canada).
| TEST PROGRAM OF THE PROTOTYPE OF THE THIN-WALLED
| PARTICULATE-PACKED (TWPP) CONTAINER.

PUBLISH
DATE

| 1987. 4 V.
| 87/00/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

| CONTAINMENT:

AUTHOR
TYPE
ORGANIZATION
TITLE

| Hall, A.R. (UKAEA Atomic Energy Research Establishme
| (ed.)
| assoc
| Commission of the European Communities, Luxembourg.
| TESTING AND EVALUATION OF SOLIDIFIED HIGH-LEVEL RADI
| WASTE.

PUBLISH

| London, UK. Graham and Trotman Ltd. 1987. 354 p. Rad
| Waste Management Series.

DATE

| 87/00/00

ABSTRACT

| This document is the final report of the 2nd joint f
| program on the testing and evaluation of the proper
| potential materials for the immobilization of high-l
| radioactive wastes.

KEYWORDS
LOCATION
REFERENCE

| CONTAINMENT:

AUTHOR
TYPE
ORGANIZATION

| Bruecher, H.; Barnet, E.; Kroth, K.; Niephaus, D.
| (Kernforschungsanlage Juelich G.M.B.H., Germany, F.R

TITLE

| Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt
| Gesellschaft E.V., Bonn, Germany, (F.R.).

PUBLISH

| TESTS ON FINAL STORAGE OF HEAT-PRODUCING MAW AND HTR
| ELEMENTS IN BOREHOLES IN SALT DEPOSITS. (in German)
| P. 437-440. Annual Meeting on Nuclear Technology '87
| Proceedings. Session 4: Fuel Cycle and Waste Process
| 829 p.

DATE

| 87/00/00

ABSTRACT
KEYWORDS

| CONTAINMENT: thermodynamics.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Nuttal, K.; McKay, P., (eds.).
govt
Atomic Energy of Canada Limited.
THE CORROSION PERFORMANCE OF NUCLEAR FUEL WASTE CON
Technical Record TR -340. 130 p.
85/00/00
CONTAINMENT: corrosion.

AUTHOR
TYPE
ORGANIZATION
TITLE

Heafield, W.; Woodall, A.; Elsdon, A.D. (British Nuc
Warrington, Cheshire, UK)
Post, R.G. (ed.)
govt

PUBLISH

THE DESIGN AND CONSTRUCTION OF THE WINDSCALE VITRIF
AND VITRIFIED PRODUCT STORE.
P. 517-522. Waste Management '87: Waste Isolation in
Technical Programs, and Public Education. Tucson, AZ
of Arizona Nuclear Engineering Dept. 1987.

DATE
ABSTRACT

87/00/00
The paper describes the background of high-level waste
vitrification development in the UK and its applicat
reprocessing operations at Sellafield.
CONTAINMENT: glass, reprocessing.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Truss, K.J.; Patterson, D.W.
govt
Atomic Energy of Canada Limited.
THE DRY STORAGE OF USED FUEL IN CONCRETE CANISTERS I
1987. 9 p.
87/00/00
CONTAINMENT: concrete.

AUTHOR
TYPE
ORGANIZATION
TITLE

Yamanaka, H.; Yamasita, M.; Wakabayashi, H.; Terai,
(Government Industrial Research Institute., Osaka, J
govt

PUBLISH

THE EFFECT OF COMPOSITION DEVIATION ON THE PROPERTIES
WASTE GLASSES, (2). LEACH RATE.
Osaka Kogyo Gijutsu Shikenjo Kiho. December 1987. V.
P.206-211.

DATE

87/12/00

ABSTRACT

For nuclear waste glasses, it is important to estima
physical and chemical properties due to deviations i
composition. Following electrical conductivity in th

KEYWORDS	paper, chemical durability has been measured for gla
LOCATION	which the content of waste oxides, sodium oxide, or
REFERENCE	oxides was changed.
	CONTAINMENT: glass, leaching.
AUTHOR	Pathania, R.S.; Cleland, R.D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE EFFECT OF THERMAL TREATMENTS ON STRESS CORROSION
	ALLOY-800 IN A CAUSTIC ENVIRONMENT.
PUBLISH	7 p. (1985). Reprinted from Corrosion (1985) 41(10):
DATE	85/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: thermodynamics, corrosion.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Inst. Columbus, OH. Office of Nucl
	Isolation.
TITLE	THE EFFECTS OF STABILIZERS ON THE HEAT TRANSFER CHAR
	OF A NUCLEAR WASTE CANISTER.
PUBLISH	Battelle Memorial Inst. Report ONWI-612, July 1986.
DATE	86/07/00
ABSTRACT	
KEYWORDS	CONTAINMENT: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Philip, J.C.
TYPE	govt
ORGANIZATION	Ukaea Harwell Lab. (UK).
TITLE	THE EFFECTS OF SULPHATE REDUCING BACTERIA ON THE COR
	MILD STEEL EMBEDDED IN A BENTONITE-GRANITIC GROUNDWA
PUBLISH	Aug. 1987. 42 p.
DATE	87/08/00
ABSTRACT	Preliminary experiments were set up to investigate h
	corrosion of forged 0.2 % carbon steel is affected b
	presence of sulphate reducing bacteria.
KEYWORDS	CONTAINMENT: corrosion, chemistry.
LOCATION	
REFERENCE	
AUTHOR	Smith, H.D.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	THE INFLUENCE OF COPPER ON ZIRCALOY SPENT FUEL CLADD
	DEGRADATION UNDER A POTENTIAL TUFF REPOSITORY CONDIT
PUBLISH	March 1987. 26 p.
DATE	87/03/00
ABSTRACT	This paper reports the results of an experiment desi
	detect the influence of copper on zircaloy spent fue
	degradation in one possible repository environment.
KEYWORDS	CONTAINMENT: corrosion, tuff.
LOCATION	
REFERENCE	
AUTHOR	Newman, R.C. (Manchester Univ. (UK). Inst. of Scienc

TYPE	Technology).
ORGANIZATION	acad
TITLE	UKAEA Harwell Lab. Materials Development Div. THE INFLUENCE OF THIOSULPHATE IONS ON THE LOCALIZED STAINLESS STEEL.
PUBLISH	October 1987. 29 p.
DATE	87/10/00
ABSTRACT	Since blast furnace slag may be added to concrete for waste containment, information on the corrosion eff thiosulphate on stainless steels such as are likely for waste canisters in contact with such concrete h reviewed and areas requiring further study are iden CONTAINMENT: corrosion.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Marsh, G.P.; Taylor, K.J.; Sooi, Z.
TYPE	
ORGANIZATION	UKAEA Harwell Lab. Materials Development Div.
TITLE	THE KINETICS OF PITTING CORROSION OF CARBON STEEL. REPORT TO JUNE 1987.
PUBLISH	February 1988. 30 p.
DATE	88/02/00
ABSTRACT	The development of an improved method for analysing data to take account of the difference in area of 1 specimens and full sized high-level nuclear waste c described.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Lister, D.H.; Davidson, R.D.; McAlpine, E.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE MECHANISM AND KINETICS OF CORROSION PRODUCT REL STAINLESS STEEL IN LITHIATED HIGH TEMPERATURE WATER
PUBLISH	28 p. (1987). Reprinted from Corrosion Science (198 27(2):113-140.
DATE	87/00/00
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	CONTAINMENT: corrosion, thermodynamics, steel.
AUTHOR	Shakelford, J.F.
TYPE	Rincon Lopez, J.M. (ed.)
ORGANIZATION	acad
TITLE	California Univ., Davis, USA; Centro de Investigaci Energeticas, Medioambientales y Technologicas, Madr Ceramica y Vidrio, Madrid, (Spain).
PUBLISH	THE NATURE OF THE GLASSY STATE. IMPLICATIONS FOR RA WASTE STORAGE.
DATE	P. 19-42. Glasses and glass-ceramics for nuclear wa management. 1987. 212 p.
ABSTRACT	87/00/00 Glass is a primary candidate for the storage of rad waste. The glassy state is defined in terms of atom structure, short range order and long range randomn CONTAINMENT: glass.
KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	Bates, J.K.; Gerding, T.J.
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	THE PERFORMANCE OF ACTINIDE-CONTAINING SRL 165 TYPE UNSATURATED CONDITIONS.
PUBLISH	1987. 12 p.
DATE	87/00/00
ABSTRACT	As part of the effort by the NNWSI project to evaluate volcanic tuff beds of Yucca Mountain as a repository permanent storage of high-level nuclear waste, the use of actinide-doped 165 type glass with the unsaturated environment has been studied.
KEYWORDS	CONTAINMENT: glass.
LOCATION	
REFERENCE	
AUTHOR	Lee, C.F.; Oscarson, D.W.; Cheung, S.C.H.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE PRESERVATION OF A CADAVER BY A CLAY SEALANT: IMP THE DISPOSAL OF NUCLEAR FUEL WASTE.
PUBLISH	5 p. 1986. Reprinted from Nuclear and Chemical Waste (1986) 6:65-69.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: clay.
LOCATION	
REFERENCE	
AUTHOR	Bates, J.K.; Gerding, T.J.; Fischer, D.F.; Ebert, W.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA (USA).
TITLE	THE REACTION OF GLASS IN A GAMMA IRRADIATED SATURATED ENVIRONMENT: PART 2, DATA PACKAGE FOR ATM-1C AND ATM-1D
PUBLISH	November 1987. 131 p.
DATE	87/11/00
ABSTRACT	A series of experiments have been performed in support of the Nevada Nuclear Waste Storage Investigations project to investigate the effects of gamma radiation on ground glass reaction.
KEYWORDS	CONTAINMENT: glass, tuff, groundwater.
LOCATION	
REFERENCE	
AUTHOR	Jensen, D.J.; Radke, C.J. (California Univ., Berkeley Chemical Engineering)
TYPE	acad
ORGANIZATION	
TITLE	THE ROLE OF A BENTONITE-BASED PACKING IN LIMITING STEADY STATE RADIONUCLIDE RELEASE FROM AN UNDERGROUND HIGH-LEVEL WASTE REPOSITORY.
PUBLISH	Ann. Nucl. Energy. 1987. V.14(3) P.153-157.
DATE	87/00/00
ABSTRACT	Steady fractional release rates are calculated for a waste canister protected by bentonite-based and alternative packing materials in both basalt and tuff repository environments.
KEYWORDS	CONTAINMENT: basalt, tuff, radionuclide migration.
LOCATION	
REFERENCE	

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Jantzen, C.M.; Bibler, N.E.
acad

THE ROLE OF GROUNDWATER OXIDATION POTENTIAL AND RAD
WASTE GLASS PERFORMANCE IN CRYSTALLINE REPOSITORY E
Materials Research Society Symposia Proceedings 50:
Nuclear Waste Management Symposium. Stockholm (Swed
9-11, 1985. p. 219.
85/00/00

CONTAINMENT: glass, groundwater, crystalline.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS

govt

THE TUFF REACTION VESSEL EXPERIMENT.
LLNL Report UCRL-53735, June 1986. 39 p.
86/06/00

CONTAINMENT: tuff.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Jantzen, C.M.; Bickford, D.F.; Karrater, D.G.
acad

TIME-TEMPERATURE-TRANSFORMATION KINETICS IN SRL WAST
Advances in Ceramics 8: 30-38.
84/00/00

CONTAINMENT: glass.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Abrajano, T.A. Jr.; Bates, J.K.
Bates, J.K.; Seefeldt, W.B. (eds.)
govt

Argonne National Lab. IL (USA).
TRANSPORT AND REACTION KINETICS AT THE GLASS: SOLUTI
REGION: RESULTS OF REPOSITORY-ORIENTED LEACHING EXPE
P. 533-546. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00

Repository-orientated leaching experiments involving
River Laboratory 165 type glass under a gamma-radiat
have been performed by the Nevada Nuclear Waste Stor
Investigations Project.
CONTAINMENT: glass, leaching,

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

McKenzie, J.M.; Self, B.G.; Walder, J.E.
govt

Sandia National Lab. NM (USA).
ULTRASONIC IDENTITY DATA STORAGE AND ARCHIVAL SYSTEM
1987. 7 p.
87/00/00

Ultrasonic seal signature information is being used
if an underwater stored spent fuel container has bee

KEYWORDS	compromised and can be used to determine if a nuclear
LOCATION	container has been compromised.
REFERENCE	CONTAINMENT: analytical techniques.
AUTHOR	acad
TYPE	
ORGANIZATION	
TITLE	WASTE CONTAINMENT AND MONITORING SYSTEM FOR THE NIAG
	STORAGE SITE.
PUBLISH	Colorado State University. 8TH Geohydro Waste Mgt. S
	(USA). Feb. 5-7, 1986. p. 537-546.
DATE	86/02/00
ABSTRACT	
KEYWORDS	CONTAINMENT: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Smith, M.J.
TYPE	govt
ORGANIZATION	Department of Energy, Washington, DC (USA).
TITLE	WASTE DISPOSAL PACKAGE.
PUBLISH	7 Jan 1987; 9 Jun 1985. 5 p.
DATE	87/01/07
ABSTRACT	A waste disposal package including an inner or prima
	for containing hazardous and/or radioactive wastes.
KEYWORDS	CONTAINMENT:
LOCATION	
REFERENCE	
AUTHOR	Bunker, B.C. (Scandia National Labs., Albuquerque, N
	Bates, J.K.; Seefeldt, W.B. (eds.).
TYPE	govt
ORGANIZATION	Argonne National Lab. Il (USA).
TITLE	WASTE GLASS LEACHING: CHEMISTRY AND KINETICS.
PUBLISH	P. 493-507. Scientific Basis for Nuclear Waste Manag
	Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	Although much has been learned concerning the kineti
	mechanisms of glass dissolution, it does not appear
	accurate predictions can yet be made concerning the
	kinetics for specific elements from a given glass as
	of environmental conditions.
KEYWORDS	CONTAINMENT: glass, leaching, dissolution.
LOCATION	
REFERENCE	
AUTHOR	Pederson, L.R.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. NM (USA).
TITLE	WASTE PACKAGE ENVIRONMENTAL STUDIES, FY 1984 ANNUAL
PUBLISH	1986. 130 p.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CONTAINMENT: monitoring.
LOCATION	
REFERENCE	
AUTHOR	McDaniel, E.W.; Gilliam, T.M.; Dole, L.R.; West, G.A
TYPE	govt

ORGANIZATION
TITLE

Oak Ridge National Lab. TN (USA).
WELDON SPRING, MISSOURI, RAFFINATE PITS 1, 2, 3, AND
PRELIMINARY GROUT DEVELOPMENT SCREENING STUDIES FOR
WASTE IMMOBILIZATION.

PUBLISH
DATE
ABSTRACT

April 1987. 28 p.
87/04/00
Results of Oak Ridge National Labs. initial support
develop a preliminary grout formula to solidify in s
Weldon Spring waste are presented.
CONTAINMENT:

KEYWORDS
LOCATION
REFERENCE

AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Maynes, Clifford assoc Nuclear Awareness Project (Canada).AR POWER BOOKLET. N.A.P, Oshawa, 1988, 48pp. 88/00/00 An overview on the nuclear fuel chain in Canada, with reference to Ontario. Considers the fuel chain as a system, of which waste disposal and management are j Companion to The Nuclear Power Show, an audio-visual presentation on the health and environmental issues with nuclear power, energy conservation, and alternative nuclear economics, and the connections with nuclear Suitable for high-school students and the general public SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: waste management education.
KEYWORDS LOCATION REFERENCE	 N.A.P. P.O.Box 2331, Oshawa, Ontario L1H 7V4 NFW 2.2-30-3
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	priv Growth Strategies Organization, Mountain West Research ASSESSMENT OF THE IMPACT OF A NUCLEAR WASTE REPOSITORY MOUNTAIN ON THE ECONOMIC DEVELOPMENT POTENTIAL OF LA CLARK COUNTY AND THE SURROUNDING AREA. Task 8.1.6 Phase 4-A, Yucca Mountain Socio-economic Mountain West Research, 1989, 12pp. 89/01/00 In order to measure the impact of siting a high-level repository at Yucca Mountain, a baseline study reflecting area's competitiveness as a business centre into the is desirable. Several factors point to a likely measure commercial success in the coming years, and some for possible. A repository facility would have several impacts on this business climate, especially with the image of the area, transportation and perceived risk SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
KEYWORDS LOCATION REFERENCE	 NFW 2.2-30-1
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	assoc/media Wadebridge Ecological Centre. CHERNOBYL, THE END OF NUCLEAR POWER? The Ecologist, Vol.16, no.4/5, 1986 86/00/00 Special issue of The Ecologist dealing with many aspects of nuclear power, including nuclear waste, reprocessing effects of radiation, reactor safety, potential for alternatives.
KEYWORDS LOCATION	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: safety analysis Worthyvale Manor, Camelford, Cornwall, PL32 9TT, U.K
REFERENCE	NFW 2.2-30-4
AUTHOR TYPE	Devin, Delbert assoc

ORGANIZATION TITLE	Serious Texans Against Nuclear Dumping (STAND). COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT FOR S COUNTY.
PUBLISH DATE	1985? 5pp. 85/00/00
ABSTRACT	Details several important factual inaccuracies in DC Environmental Assessment document, relating to agric geography, water resources. Leads to mistrust of DC published information.
KEYWORDS LOCATION REFERENCE	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: public partic STAND, Rt. 2, Box 28, Tulia, Texas 79088 anne
AUTHOR TYPE ORGANIZATION TITLE	Filby, R.H.; Stohr, J.S. assoc Hanford Historical Documents Review Committee. WA (U ENVIRONMENTAL AND HEALTH STUDIES OF POTENTIAL IMPACT HANFORD OPERATIONS.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 347-350.
DATE ABSTRACT	87/00/00 This paper summarizes investigations and historical the Hanford reservation.
KEYWORDS LOCATION REFERENCE	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: native.
AUTHOR TYPE ORGANIZATION TITLE	anon HIGHER REGIONAL COURT CELLE, JUDGEMENT OF DECEMBER 9 (LEGAL TERM OF RADIOACTIVE WASTE).
PUBLISH DATE ABSTRACT	Neue Jurist. Wochenschr. May 20, 1987. V. 40(21) p. 87/05/20 In its decision of December 9, 1986, the higher regi Celle deals with the legal term of radioactive waste
KEYWORDS LOCATION REFERENCE	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: waste charact
AUTHOR TYPE ORGANIZATION TITLE	Gray, S.; Boryczka, M.; Hines, B. acad IMPACT ANALYSIS AND COMMUNITY DEVELOPMENT NEEDS AT T WASTE MANAGEMENT '84.
PUBLISH	Proceedings of the Symposium on Waste Management, Vo 11-15, 1984. p. 195-198.
DATE ABSTRACT KEYWORDS LOCATION REFERENCE	84/00/00 SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
AUTHOR TYPE ORGANIZATION TITLE	Hendrickson, P.L.; Scott, M.J.; Mullen, M.F.; Nichol govt Pacific Northwest Lab. WA (USA). IMPACT OF PROPOSED FINANCIAL ASSURANCE REQUIREMENTS MATERIALS LICENSEES.
PUBLISH DATE	Sept. 1987. 135 p. 87/09/00

ABSTRACT	The NRC is considering a possible rulemaking that would certain nuclear materials licensees to demonstrate f ability to clean up accidental releases of radioacti materials. The rulemaking would potentially affect a 16,350 NRC and agreement state licensees. Specific t examined in the report include: characteristics of p affected licensees; the availability and cost of var financial assurance mechanisms; the financial impact licensees; the cost of administering a financial ass and, overall benefits and costs.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: licensing, ec
LOCATION	
REFERENCE	
AUTHOR	Branch, K.M.; Cluett, C.; Page, T.L. (Battelle Human Research Centers, Seattle, WA); Post, R.G. (ed.).
TYPE	
ORGANIZATION	
TITLE	INTEGRATING ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSM
PUBLISH	P.125-130. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	This paper discusses the need for close integration environmental and socio-economic assessment efforts some of the benefits and difficulties of achieving t information.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	
AUTHOR	Ehlers, P.; Pelzer, N. (Ed.).
TYPE	assoc
ORGANIZATION	
TITLE	INTERNATIONAL AND NATIONAL REGULATIONS FOR THE PROTE NORTH AND BALTIC SEAS AGAINST RADIOACTIVE EMISSIONS
PUBLISH	Peaceful uses of Nuclear Energy and State Frontiers Europe. Proceedings. Baden-Baden, (FRG). 1987. 394 p 206-226.
DATE	87/00/00
ABSTRACT	Radioactive substances have only a subordinate impor concerning harmful substances in North and Baltic Se aspects, international, are examined.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: regulations, international.
LOCATION	
REFERENCE	
AUTHOR	McBrien, S.; Jones, L.
TYPE	govt
ORGANIZATION	MITRE Corp. VA (USA).
TITLE	NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS: SOCIOEC IMPACTS OF CONSTRUCTING A HIGH-LEVEL WASTE REPOSITORY MOUNTAIN.
PUBLISH	Sandia National Labs Report 84-7201. Dec. 1984. 205
DATE	84/12/00
ABSTRACT	Socioeconomic impacts to Nye and Clark counties asso construction and operation of a high-level radioacti repository at Yucca Mountain are estimated.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	

REFERENCE

AUTHOR Willis, Y.A.; Morris, W.R.
TYPE priv
ORGANIZATION Westinghouse Electric Corp., PA (USA).
TITLE NUCLEAR WASTE INFORMATION MADE ACCESSIBLE: A CASE STUDY
PUBLISH Waste Management '87: Waste Isolation in the US, Technology
Programs and Public Education. Tucson, AZ, (USA). University of
Arizona Nuclear Engineering Dept. 1987. p. 137-142.
DATE 87/00/00
ABSTRACT Public acceptance and cooperation for nuclear energy
Westinghouse has responded to this with the establishment of a
Nuclear Waste Management Outreach Program making nuclear waste
information easily accessible.
KEYWORDS SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: education, waste
management.

LOCATION
REFERENCE

AUTHOR Brody, Julie
TYPE govt
ORGANIZATION Nuclear Waste Studies Program, Texas Department of Agriculture
(USA).
TITLE PANHANDLE RESIDENTS' VIEWS OF HIGH-LEVEL NUCLEAR WASTE
PUBLISH Office of Natural Resources and Office of Research and
Planning, Texas Department of Agriculture, Austin, TX
108pp.
DATE 85/05/00
ABSTRACT Residents of four Texas counties were surveyed regarding
attitudes about potential socio-economic effects of

KEYWORDS waste repository. The majority strongly oppose construction
LOCATION a facility, with health and environmental effects the most
REFERENCE important factors. There are also strong concerns about
on social and economic life of the area. A farm survey
conducted shows wide ranging potential effects on agriculture,
especially marketability of agricultural produce.
SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: public participation
Texas Department of Agriculture, Box 12847, Austin, TX
anne

AUTHOR
TYPE govt
ORGANIZATION Oak Ridge Associated Universities, Inc. TN (USA).
TITLE RADIOACTIVE WASTE MANAGEMENT FELLOWSHIP PROGRAM: SUMMARY
PROGRAM ACTIVITIES FOR CALENDAR YEAR 1986.
PUBLISH 1987. 44 p.
DATE 87/00/00
ABSTRACT This document describes a graduate fellowship program to
guide future scientists and engineers toward a career in
high-level radioactive waste management.
KEYWORDS SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: social impacts
LOCATION
REFERENCE

AUTHOR
TYPE media
ORGANIZATION
TITLE ROLE OF OUTSIDE VENDORS EXPANDS IN TWO NUCLEAR-SERVICE
PUBLISH Power. December 1987. V. 131(12). p. 31-33.
DATE 87/12/00
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

assoc
Citizen Alert. (USA).
SENATE BILL OFFERS NUKE WASTE BRIBE.
Citizen Alert Newsletter, Reno, April, 1987, 1p.
87/04/00
U.S. Senators recommend annual payments of \$100 mill
state which accepts a nuclear waste repository withi
borders, in exchange for expeditious site characteri
waiver of rights to court actions against DOE, waiv
provisions of National Environmental Protection Act.
incentives point to Nevada as a likely site because
relatively poor economic situation.
SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: policy and ad
Citizen Alert, Box 5391, Reno, Nevada 89513.
anne

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Kasperson, R.E (chairman).
assoc
Panel on Social and Economic Aspects of Radioactive
Management, Washington. (USA).
SOCIAL AND ECONOMIC ASPECTS OF RADIOACTIVE WASTE DIS
CONSIDERATIONS FOR INSTITUTIONAL MANAGEMENT.
National Academy Press, 1984.
84/00/00
SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Forsythe, R.
assoc
Mississippi Energy & Transportation Board. MS (USA).
SOCIOECONOMIC ISSUES OF HIGH-LEVEL WASTE REPOSITORY
POLICIES AND PROGRAMS, HIGH-LEVEL WASTE).
Waste Management Conference 1984. Tucson, AZ (USA).
1984. V. 1, p. 215-220.
84/03/00
Responses to several papers concerning the socioecon
associated with high-level radioactive waste disposa
compiled. The importance of developing a viable publ
interaction process in the construciton and operatio
repositories is underscored.
SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE

Moore, R.C. (Wyoming Industrial Siting Administratio
WY)
Post, R.G. (ed.)
STRATEGIES FOR SUCCESSFUL MITIGATION OF SOCIO-ECONOM
P.101-108. Waste Management '87: Waste Isolation in
technical programs, and public education. Tucson, AZ.
of Arizona Nuclear Engineering Dept. 1987.
87/00/00

ABSTRACT

The successful mitigation of socio-economic impacts requires careful planning for project inception through project completion. Project location and the schedule for various construction activities can have significant effect. Depending on the proximity of a proposed site to different communities, impacts can be radically different given housing and transportation plans.

KEYWORDS
LOCATION
REFERENCE

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: social impacts

AUTHOR

Keith, Gary

TYPE
ORGANIZATION

govt
Nuclear Waste Studies Program, Texas Department of Energy (USA).

TITLE

THE ARROGANCE OF POWER, OR WHEN THE LEAD STARTS TO LAG
IMPACTS AND CONSEQUENCES OF NUCLEAR WASTE REPOSITORIES
T.D.A. Austin, May, 1987, 23pp.

PUBLISH

DATE

87/05/00

ABSTRACT

Real and perceived risks to natural resources (land and water) have the effect of "quarantining" the resources of a region. Natural resource issues are intimately bound up with economic issues. The "representative democracy" approach to public participation in decision-making is simply not adequate for the nuclear waste disposal issue.

KEYWORDS

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: public participation in decision making.

LOCATION
REFERENCE

T.D.A. P.O.Box 12847, Austin, Texas 78711
NFW 2.2-30-2

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

govt/assoc
International Atomic Energy Agency. Vienna (Austria)
THE RADIOLOGICAL ACCIDENT IN GOIANIA.
Report STI/PUB/815, IAEA, Vienna.
88/00/00

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:

AUTHOR
TYPE
ORGANIZATION
TITLE

govt
Texas Department of Agriculture. (USA).
THE TEXAS DEPARTMENT OF AGRICULTURE AND THE ISSUE OF HIGH-LEVEL NUCLEAR WASTE DUMP.

PUBLISH

DATE

T.D.A., Austin,

ABSTRACT

An outline of the involvement of the Texas Department of Agriculture in the nuclear waste disposal issue since 1970. Lists TDA's criticisms of DOE's Draft Environmental Impact Statement of the Texas sites, which would be generally applicable to the waste site assessment program.

KEYWORDS
LOCATION

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
Texas Department of Agriculture, P.O.Box 12847, Austin, Texas 78711

REFERENCE

NFW 2.2-30-5

AUTHOR	Brody, Julie; Fleischmann, Judy
TYPE	govt
ORGANIZATION	Nuclear Waste Studies Program, Texas Department of A (USA).
TITLE	EFFECTS OF A HIGH-LEVEL NUCLEAR WASTE REPOSITORY ON COMMUNITIES: A SURVEY OF PANHANDLE RESIDENTS.
PUBLISH	TDA, Austin, February, 1987
DATE	87/02/00
ABSTRACT	Third in a series of surveys of residents in the area a potential high-level waste repository site in Texas that those opposed to an eventual repository are also site characterization, believing that characterization to the door to an eventual repository. Most people expect negative social and economic impacts, negative environmental impacts, there was great uncertainty about on employment. Urban and rural residents expressed kinds of concerns.
KEYWORDS	SOCIAL IMPACTS:
LOCATION	TDA, P.O.Box 12847, Austin, Texas 78711
REFERENCE	NFW 2.2-31-4

AUTHOR	Petterson, J.S.
TYPE	priv/govt
ORGANIZATION	Impact Assessment, Inc. CA (USA).; Nuclear Waste Pro NV (USA).
TITLE	GOINIA INCIDENT CASE STUDY.
PUBLISH	June 1988. 42 p.
DATE	88/06/00
ABSTRACT	This report necessarily begins with a brief summary describing the Goiania, Brazil, incident; followed by description of the objectives of this follow-up study description of the specific plan of work that was undertaken and the results of the study.
KEYWORDS	SOCIAL IMPACTS:
LOCATION	
REFERENCE	NFW 2.2-31-2

AUTHOR	Robbins, Walter.
TYPE	media
ORGANIZATION	
TITLE	HEWERS OF WOOD, STORERS OF POISON: IS U.S. NUCLEAR W FOR CANADA?
PUBLISH	This Magazine (October 1987) 21(5):4-5.
DATE	87/10/00
ABSTRACT	
KEYWORDS	SOCIAL IMPACTS:
LOCATION	
REFERENCE	

AUTHOR	Walker, D.E.Jr. (Dept. of Anthropology, Univ. of Col Boulder, CO) Post, R.G. (ed.)
--------	--

TYPE	acad
ORGANIZATION	
TITLE	NATIVE AMERICANS AND CULTURAL IMPACT ANALYSIS: THE P NUCLEAR WASTE REPOSITORY AT HANFORD.

PUBLISH	P. 123-124. Waste Management '87: Waste Isolation i
DATE	Technical Programs, and Public Education. Tucson, A
ABSTRACT	of Arizona Nuclear Engineering Dept. 1987.
	87/00/00
	Beneath a surface patterning of legal, political, e
	other formal structures, native american reservatio
	tribes posses many culturally distinctive values an
	life. Their primary objective is survival, and soci
	cultural impact assessment theories and methods mus
	this objective.
KEYWORDS	SOCIAL IMPACTS: native.
LOCATION	
REFERENCE	
AUTHOR	Cummings, Ronald G. (University of New Mexico).
TYPE	acad
ORGANIZATION	Nuclear Waste Project Office. State of Nevada Agency
	Projects. (USA).
TITLE	NEW MEXICO WASTE ISOLATION PILOT PROJECT (WIPP): AN
	OVERVIEW.
PUBLISH	NWPO-SE-013-88, Carson City, June 1988, 46pp.
DATE	88/06/00
ABSTRACT	Reviews technical, transportation and general issues
	relating to public confidence in DOE) which have ar
	the siting and construction process for WIPP (the f
	repository for transuranic military wastes). Some
	issues have resulted in conflicts and may be used as
	lessons for future waste disposal scenarios, as well
	suggesting possible mitigation methods.
KEYWORDS	SOCIAL IMPACTS: geologic disposal, transport.
LOCATION	Capitol Complex, Carson City, Nevada 89710
REFERENCE	NFW 2.2-31-1
AUTHOR	Foster, D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	NUCLEAR FUEL WASTE MANAGEMENT: A PRELIMINARY EVALUAT
	SOCIAL ISSUES.
PUBLISH	Technical Report TR-332. 20 p.
DATE	85/00/00
ABSTRACT	This report identifies and explores a number of soci
	that arise in connection with nuclear fuel waste dis
	Canada.
KEYWORDS	SOCIAL IMPACTS: waste management.
LOCATION	
REFERENCE	NFW 2.2-31-3
AUTHOR	Strassburg, W.
TYPE	govt
ORGANIZATION	Deutsche Gesellschaft fuer Wiederaufarbeitung von
	Kernbrennstoffen M.B.H. (FRG).
TITLE	NUCLEAR WASTE DISPOSAL. STATE OF THE DEBATE IN THE F
	REPUBLIC OF GERMANY.
PUBLISH	Energiewirtsch. Tagesfragen. May 1987. V. 37(5) p. 3
DATE	87/05/00
ABSTRACT	Technical problems are, and have been, hardly an iss
	debate about nuclear waste disposal. The predominati
	increasingly important issue are general questions o
	regarding the peaceful use of nuclear energy in the
KEYWORDS	SOCIAL IMPACTS:
LOCATION	

REFERENCE

AUTHOR	Blowers, A.; Lowery, D.
TYPE	acad
ORGANIZATION	The Open University. (UK).
TITLE	OUT OF SIGHT, OUT OF MIND: THE POLITICS OF NUCLEAR W
PUBLISH	UNITED KINGDOM.
DATE	Nuclear Power in Crisis: Politics and Planning for t
ABSTRACT	State. 1987. p. 129-163.
KEYWORDS	87/00/00
LOCATION	This paper examines the proposition that waste dispo
REFERENCE	in the UK is a political rather than a 'rational' or
	'scientific' process.
	SOCIAL IMPACTS: waste management.

AUTHOR	Robbins, Walter.
TYPE	media
ORGANIZATION	
TITLE	PEOPLE AND NUCLEAR WASTE (IN MANITOBA).
PUBLISH	NeWest Review (1988) 13(10):4-5.
DATE	88/00/00
ABSTRACT	
KEYWORDS	SOCIAL IMPACTS: public participation.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	TECHNOCRACY AND TRUST: NUCLEAR WASTE CONTROVERSY.
PUBLISH	Journal of Professional Activities-ASCE. January 198
DATE	p. 27-40.
ABSTRACT	88/01/00
KEYWORDS	SOCIAL IMPACTS: public participation.
LOCATION	
REFERENCE	

AUTHOR	Fleishman, J.; Brody, J.; Galavotti, C. (Texs Dept.
TYPE	Agriculture, Austin, TX)
ORGANIZATION	Post, R.G.(ed.)
TITLE	govt
PUBLISH	THE IMPORTANCE OF COUNTING COWS: SOCIAL AND ECONOMIC
DATE	HIGH-LEVEL NUCLEAR WASTE REPOSITORY IN TEXAS.
ABSTRACT	P. 95-100. Waste Management '87: Waste Isolation in
KEYWORDS	Technical Programs, and Public Education. Tucson, AZ
LOCATION	of Arizona Nuclear Engineering Dept. 1987.
REFERENCE	87/00/00
	Impacts assessments that rely on existing records an
	extrapolation from broad geographic areas provide in
	information about social and economic conditions imp
	siting a high-level nuclear waste repository.
	SOCIAL IMPACTS: economics, siting.

AUTHOR	Curd, P.J.; Strange, R.C.
TYPE	priv

ORGANIZATION	Nuclear Industry Radioactive Waste Executive, (UK).
TITLE	THE PUBLIC NEEDS TO KNOW.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 45-50.
DATE	87/00/00
ABSTRACT	The conflict between a general national interest and local concern presents a formidable and perhaps insc public relations problem.
KEYWORDS	SOCIAL IMPACTS: public participation.
LOCATION	
REFERENCE	
AUTHOR	Curd, P.; Monckton, N. (Nuclear Industry Radioactive Executive, Harwell, UK)
TYPE	
ORGANIZATION	
TITLE	THE REAL PROBLEM: PUBLIC ACCEPTIBILITY.
PUBLISH	Nucl. Eng. March-April 1988. V.29(2) P. 58-63.
DATE	88/03-04/00
ABSTRACT	The paper concerns the problem of public acceptibili radioactive waste disposal in the United Kingdom.
KEYWORDS	SOCIAL IMPACTS: public participation.
LOCATION	
REFERENCE	
AUTHOR	Colglazier, E.W.; Dungan, D.L.; Reaven, S.J.
TYPE	acad
ORGANIZATION	The University of Tennessee. TN (USA).
TITLE	VALUE ISSUES AND STAKEHOLDERS' VIEWS IN RADIOACTIVE
PUBLISH	MANAGEMENT. Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 185-196.
DATE	87/00/00
ABSTRACT	The authors review a study in progress that is exami played by ethical and value issues in high-level and radioactive waste management. For each policy issue to separate its 'value concerns' into three categori procedural distributional, and evidential asects.
KEYWORDS	SOCIAL IMPACTS: ethics.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	UK NIREX LTD
TITLE	COMMUNITY BENEFIT PROGRAMME-GENERAL PRINCIPLES.
PUBLISH	Pieda, Planning, Economic and Development Consultant
DATE	88/06/00
ABSTRACT	A study which develops a proactive approach to bring benefits to a British community in the vicinity of a facility.
KEYWORDS	SOCIAL IMPACTS: legislation
LOCATION	
REFERENCE	NFW 2.2-31-5

AUTHOR	
TYPE	
ORGANIZATION	
TITLE	A STUDY IN NUCLEAR DECOMMISSIONING.
PUBLISH	Civil Engineering ASCE. February 1988. V. 58(2). p.
DATE	88/02/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: waste management.
LOCATION	
REFERENCE	

AUTHOR	Kochen, R.L.; Thomas, R.L.
TYPE	priv
ORGANIZATION	Rockwell International Corp. CO (USA).
TITLE	ACTINIDE REMOVAL FROM AQUEOUS SOLUTION WITH ACTIVATED
PUBLISH	10 Aug. 1987. 14 p.
DATE	87/08/10
ABSTRACT	Describes an actinide aqueous waste treatment process activated magnetite developed at Rocky Flats, CO. The effectiveness of various magnetites in lowering actinide concentrations in aqueous solution is described.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Segal, D.L.; Willis, H.; Woodhead, J. (UKAEA Atomic Research Establishment, Harwell. Engineering Div.); (UKAEA Atomic Energy Research Establishment, Harwell Div.)
TYPE	assoc
ORGANIZATION	UKAEA Atomic Energy Research Establishment, Harwell. Sciences Div.; Department of the Environment, London
TITLE	APPLICATION OF GEL PROCESSES IN THE TREATMENT OF ACTINIDE-CONTAINING LIQUID WASTES.
PUBLISH	April 1987. 15 p.
DATE	87/04/00
ABSTRACT	Aqueous sol-gel materials including zirconia and alumina together with glass-ionomer cements have been used to immobilize inactive mixed Al/Fe/Cr-hydroxide flocs representative of those produced during fuel reprocessing.
KEYWORDS	VOLUME REDUCTION: reprocessing.
LOCATION	
REFERENCE	

AUTHOR	Lupparelli, V.; Nobili, A.
TYPE	govt
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	APPLICATION OF THE GEL SUPPORTED PRECIPITATION PROCESS IN THE NUCLEAR FIELD. CONVERSION OF U-PU SOLUTIONS FOR (U,P) CERAMICS.
PUBLISH	Proceedings of an International Symposium on the Nuclear Fuel Cycle: Strategies and Options. Jointly organized by the International Atomic Energy Agency and the Nuclear Energy Agency of the OECD and held in Vienna, 11-15 May 1987.
DATE	87/00/00

ABSTRACT	VOLUME REDUCTION: waste handling and emplacement, i
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	
TITLE	APPROACHES TO SOURCE REDUCTION.
PUBLISH	Environmental Defence Fund Report. June 1986. 175 p
DATE	86/06/00
ABSTRACT	VOLUME REDUCTION:
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Hoegler, J.M.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	BENCH-SCALE MAGNETIC SEPARATION OF DEPARTMENT OF EN
PUBLISH	July 1987. 44 p.
DATE	87/07/00
ABSTRACT	Criteria were developed for selection of candidate v testing magnetic separation of uranium and/or other materials.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Mogg, C.S.; Heafield, W. (British Nuclear Fuels PLC, Warrington, Cheshire, UK); Post, R.G. (ed.).
TYPE	
ORGANIZATION	
TITLE	BNFL'S OBJECTIVES AND ACHIEVEMENTS IN THE REDUCTION RADIOACTIVE DISCHARGES FROM REPROCESSING PLANTS.
PUBLISH	P. 613-622. Waste Management '87: Waste Isolation in Technical Programs and Public Education. Tucson, AZ. of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	This paper describes the regulatory framework within operates, the reduction of Sellafield discharges and principal processes by which this reduction is being VOLUME REDUCTION: reprocessing.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Passant, F.H.; Haigh, C.P.; Willis, A.S.D. (Central Generating Board, Berkeley, UK. Berkeley Nuclear Lab
TYPE	
ORGANIZATION	
TITLE	CEGB DISSOLVES MAGNOX FUEL ELEMENT DEBRIS AT DUNGENE
PUBLISH	Nucl. Eng. Int. Febuary 1988. V. 33(403) P. 48-49.
DATE	88/02/00
ABSTRACT	The CEGB's intensive development programme for manag fuel element debris currently stored at Britain's ma stations has produced a treatment method which disso magnesium constituent in carbonic acid, significantl the volume of radioactive waste left for subsequent and disposal.
KEYWORDS	VOLUME REDUCTION:
LOCATION	

REFERENCE

AUTHOR Burch, W.D.; Stradley, J.G.; Lerch, R.E.
 TYPE priv/govt
 ORGANIZATION Oak Ridge National Lab. TN (USA).
 TITLE CONCEPT FOR A SMALL, COLOCATED FUEL CYCLE FACILITY F
 BREEDER FUELS.
 PUBLISH 1987. 11 p.
 DATE 87/00/00
 ABSTRACT In examination of innovative liquid-metal reactor sy
 over the past three years, Oak Ridge and the Westing
 Hanford Co., collaborated on studies of mixed oxide
 options. A principal effort was an advanced concept
 integrated fuel cycle colocated with a 1300-MW react
 VOLUME REDUCTION: waste management.

KEYWORDS
 LOCATION
 REFERENCE

AUTHOR Barrett, J.L.
 TYPE priv
 ORGANIZATION P.E.C. Engineering, Osny, (France).
 TITLE CONDITIONING PROCESS BY SOLIDIFICATION OF DANGEROUS
 NUCLEAR WASTES.
 PUBLISH 30 Jan. 1987. 8 p.
 DATE 87/01/30
 ABSTRACT A hydraulic binder and additives are introduced into
 equipped with a mixer, wastes are introduced, slowly
 solidified in the container. A device for applicatio
 process is developed.
 VOLUME REDUCTION:

KEYWORDS
 LOCATION
 REFERENCE

AUTHOR Bursill, L.A.
 TYPE acad
 ORGANIZATION University of Melbourne. (Australia).
 TITLE CONSEQUENCES OF THE RADIATION-INDUCED TRANSFORMATION
 SYNTHETIC HOLLANDITE-TYPE PHASES.
 PUBLISH Journal of Solid State Chemistry. Aug. 1987. V. 69(2)

DATE 87/08/00
 ABSTRACT Criteria for the safe immobilization of 137CS in syn
 Hollandite-type phases are reviewed with respect to
 crystallographic, and physical stability, including
 radiation damage. Synthetic preparations so far poss
 properties which offer some optimism that a relative
 waste product is possible following changes in charg
 radius of the radioactive ions, but this is by no me
 established.

KEYWORDS
 LOCATION
 REFERENCE
 VOLUME REDUCTION:

AUTHOR Looper, M.G.; Charlesworth, D.L.
 TYPE
 ORGANIZATION Savannah River Lab. SC (USA).
 TITLE DEMONSTRATION OF REMOTELY OPERATED TRU WASTE SIZE RE
 MATERIAL HANDLING EQUIPMENT.
 PUBLISH 1988. 10 P.
 DATE 88/00/00
 ABSTRACT The Savannah River Lab is developing remote size red
 material handling equipment to prepare 238pu contami

KEYWORDS	for permanent disposal at the waste isolation pilot Mexico.
LOCATION	VOLUME REDUCTION: waste handling and emplacement.
REFERENCE	
AUTHOR	Kanno, T.; Mimura, H; Akiba, K.; Suzuki, S.; Mitsuga
TYPE	Hara, M.
ORGANIZATION	acad
TITLE	Tohoki University, (Japan); Research Institute for and other Metals.
PUBLISH	DENITRATION OF HIGH-LEVEL LIQUID WASTE AND REMOVAL OF STRONTIUM WITH ZEOLITES.
DATE	Chemical Aspects of Down Stream for Thorium Fuel Cycle Japan. Atomic Energy Society of Japan. March 1987. 291-100.
ABSTRACT	87/03/00 The denitration of high-level liquid waste and the removal of Cs and Sr have been studied by the use of formic acid in the simulated HLLW containing platinum elements.
KEYWORDS	VOLUME REDUCTION: waste characterization.
LOCATION	
REFERENCE	
AUTHOR	Inque, Y.; Tochiyama, O.; Tanaka, K.; Suzuki S.; Mit
TYPE	T.; Toshiaki, H.; Hara, M.
ORGANIZATION	acad Tohoki University, (Japan); Research Institute for I
TITLE	and other Metals.
PUBLISH	DEPOSITION OF PROTACTINIUM IN MOLTEN LIF-NAF-KF EUTECTIC ALKALINE EARTH OXIDES.
DATE	Chemical Aspects of Down Stream for Thorium Fuel Cycle Japan. Atomic Energy Society of Japan. March 1987. 243-255.
ABSTRACT	87/03/00 With the aim to establish a method for reprocessing nuclear fuels, the liquid-solid distribution of ²³³ Pu in molten LIF-NAF-KF eutectic and either BEO, MGO, or CaO was studied at 600 Deg Cel, under various conditions.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Williams, S.; Charlesworth, D.L.
TYPE	
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	DEVELOPMENT OF A PLUTONIUM-239 RECOVERY INCINERATOR.
PUBLISH	1988. 10 p.
DATE	88/00/00
ABSTRACT	A plutonium-239 recovery incinerator is being developed at the Savannah River plant to reduce the volume of solid high level waste and to allow recovery of some waste materials.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Bickford, D.F.; Jantzen, C.M.
TYPE	acad
ORGANIZATION	

TITLE	DEVITRIFICATION BEHAVIOUR OF SRL DEFENCE WASTE GLASS
PUBLISH	Materials Research Society Symposia Proceedings 26:
DATE	84/00/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	Bickford, D.F.; Jantzen, C.M.
TYPE	acad
ORGANIZATION	
TITLE	DEVITRIFICATION OF DEFENCE NUCLEAR WASTE GLASSES: RO
PUBLISH	INSOLUBLES.
DATE	Journal of Non-Crystalline Solids 84: 299-307.
ABSTRACT	86/00/00
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	Bruecher, H.; Merz, E.
TYPE	
ORGANIZATION	Bundesministerium fuer Umwelt, Naturschultz und
	Reaktorsicherheit, Bonn, Germany, F.R.; Kernforschung
	Juelich G.M.B.H., Germany, F.R. Inst. fuer Chemishe
	der Nuklearen Entsorgung.
TITLE	DISPOSAL STRATEGIES FOR SPECIAL WASTES. (in German)
PUBLISH	1987. 147 p. Schriftenreihe Reaktorsicherheit und
DATE	Strahlenschultz.
ABSTRACT	87/00/00
	Special attention is being paid to the treatment and
	the volatile radionuclides tritium, carbon-14, krypt
	iodine-129 arising from reprocessing of spent nuclea
KEYWORDS	VOLUME REDUCTION: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Broek, W.M.; Bruining, J.
TYPE	acad
ORGANIZATION	Technische University Delft. (Netherlands).
TITLE	DISSOLUTION OF RADIOACTIVE WASTE MIXED WITH GLASS IN
PUBLISH	12-Procestechnologie. Jan. 1987. No. 1. p. 29-32.
DATE	87/01/00
ABSTRACT	A barrier regarding the disposal of radioactive wast
	described. The vitrification of nuclear fission wast
	borosilicate glass is the method outlined.
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	DISSOLUTION OF USED CANDU FUEL AT VARIOUS TEMPERATUR
PUBLISH	CONDITIONS.
	Nuclear Waste Management Symposium. Stockholm (Swede
	9-11, 1985. p. 317.
DATE	85/09/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: dissolution.
LOCATION	

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION

Matsuura, H.; Tomura, H.

priv

Nippon Atomic Industry Group Co., Ltd., (Japan).
DRYING PROCESS OF BWR CONCENTRATED WASTES IN WIPED
EVAPORATOR.

NAIG (Nippon At. Ind. Group) Annual Review. 1987. p.
87/00/00

Published in summary form only.

VOLUME REDUCTION:

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

priv/govt

Ontario Hydro. (Canada).

DRYING, PELLETIZING, SINTERING AND LEACHING OF SOL-G
AMINE HIGH-LEVEL LIQUID WASTE.

1986. 60 P.

86/00/00

VOLUME REDUCTION:

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

Weishaupt.

govt

Kernforschungszentrum Karlsruhe (FRG).

ELECTROLYSIS PROCESSES IN REPROCESSING: FROM LABORAT
TECHNICAL USE IN WACKERDORF REPROCESSING PLANT.

Lectures of the 6th Status Report on the Project for
and Waste Treatment, March 13-14, 1986. 545 p. P. 98

86/03/00

The use of electrolysis apparatus in the extraction
the Wackersdorf reprocessing plant can be regarded a
success due to the practically fault-free behaviour
plutonium cycle. The results of tests performed are
here.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

Burill, L.A.; Smith, D.J.

acad

University of Melbourne. (Australia).

ELECTRON IRRADIATION EFFECTS IN (CS,BA)-HOLLANDITES.

Journal of Solid State Chemistry. Aug. 1987. V. 69(2)

87/08/00

High resolution electron microscopy examination of m
(CS,BA)-Hollandites reveals evidence for significant
order in the distribution of cation vacancies in the
incompletely occupied tunnels. It is evident that Ho
are structurally, chemically, and mechanically unsta
intense electron irradiation.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE

Vance, J.N.

govt

ORGANIZATION TITLE	Electric Power Research Institute. CA (USA). ENGINEERING EVALUATION OF SELECTIVE ION-EXCHANGE RAD WASTE PROCESSING AT SUSQUEHANNA NUCLEAR POWER PLANT:
PUBLISH DATE ABSTRACT	REPORT. Jan. 1989. 38 p. 89/01/00 This final report describes the work performed of an feasibility evaluation of the use and benefits of a ion exchange treatment process in the Susquehanna ra system. The evaluation addressed operability and pro capability concerns, radiological impacts of operati radwaste discharge mode, required hardware modificat radwaste and plant make-up systems.
KEYWORDS LOCATION REFERENCE	VOLUME REDUCTION: engineering.
AUTHOR	Camilio, R.L.; Goncalves, M.A.; Carvalho, E.I. de; N A.K.; Araujo, B.F. de (Inst. de esquisas Energeticas Nucleares, Sao Paulo, Brazil)
TYPE ORGANIZATION	Associacao Brasileira de Energia Nuclear, Rio de Jan (Brazil).
TITLE	EVALUATION AND PERFORMANCE OF MIXER-SETTLERS USED FO EXTRACTION (in Portugese)
PUBLISH	P. 325-336. Proceedings of the 2. General Congress o Energy- V.2. 1988. 498 p.
DATE ABSTRACT	88/00/00 This paper deals with four conceptions of mixer-sett actinide purification and recovery. By means of the concentration profiles in the organic and aqueous ph evaluation of each mixer-settler was made.
KEYWORDS LOCATION REFERENCE	VOLUME REDUCTION:
AUTHOR TYPE ORGANIZATION TITLE	Chipman, N.A.; Carleson, T.E. priv Westinghouse Idaho Nuclear Co, Inc., (USA). EVALUATION OF A MODIFIED ZIRFLEX PROCESS TO MINIMIZE WASTE GENERATION AT THE IDAHO CHEMICAL PROCESSING PL
PUBLISH DATE ABSTRACT	June 1987. 61 p. 87/06/00 The report deals with extensive laboratory experimen conducted to develop a dissolvent suitable for zirca fuels having a surface oxide coating.
KEYWORDS LOCATION REFERENCE	VOLUME REDUCTION:
AUTHOR TYPE ORGANIZATION TITLE PUBLISH	Shurte, E.A.; Rankin, W.N. govt/acad Vanderbilt Univ., Nashville, TN; Savannah River Lab. EVALUATION OF COMMERCIALY AVAILABLE DECONTAMINATION 1988. 16 p.

DATE	88/00/00
ABSTRACT	The effectiveness of commercially available decontam solutions was compared with the effectiveness of 10% in controlled laboratory tests.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Kochen, R.L.; Navratil, J.D. (Rockwell International Golden, CO).
TYPE	priv
ORGANIZATION	
TITLE	FERRITE TREATMENT OF ACTINIDE AQUEOUS WASTE.
PUBLISH	Lathanide Actin. Res. 1987. V. 2(1) P. 9-22.
DATE	87/00/00
ABSTRACT	A plutonium and americium waste treatment process us has been developed at Rocky Flats.
KEYWORDS	VOLUME REDUCTION: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	
TITLE	FIXATION OF WASTE MATERIALS IN GROUT, PART I: EMPIRI CORRELATIONS OF FORMULATION DATA.
PUBLISH	ORNL Report TM-9680/PI. March 1986. 45 p.
DATE	86/03/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Fritsch, T.; Henrich, E.; Roemer, J.
TYPE	govt
ORGANIZATION	Kernforschungszentrum Karlsruhe (FRG).
TITLE	FIXING AND STORAGE OF FISSION KRYPTON IN METALS.
PUBLISH	Lectures of the 6th Status Report on the Project for and Waste Treatment, March 13-14, 1986. 545 p. P.257
DATE	86/03/00
ABSTRACT	The fixing of krypton in ion atomizer pumps is the o conditioning process so far, which manages without h pressure, high temperature, and without the accumula unfixed krypton in all stages and therefore pays spe attention to safety.
KEYWORDS	VOLUME REDUCTION: safety analysis.
LOCATION	
REFERENCE	
AUTHOR	Pacovsky, V.
TYPE	
ORGANIZATION	
TITLE	FURNACE FOR RADIOACTIVE WASTE VITRIFICATION.
PUBLISH	1 July 1987; 6 March 1984. 9 p.
DATE	87/07/01
ABSTRACT	The design is presented of a furnace for the continu vitrification of radioactive waste by medium frequen

KEYWORDS	induction heating.
LOCATION	VOLUME REDUCTION:
REFERENCE	
AUTHOR	Lanza, F.; Ronsecco, C.
TYPE	assoc
ORGANIZATION	Commission of European Communities, Luxembourg.
TITLE	GLASS LEACHING IN WET POROUS MEDIA.
PUBLISH	European Applied Research Reports. 1984. V. 6(1-2).
DATE	84/00/00
ABSTRACT	Leaching tests of a borosilicate glass containing si level radioactive waste in different wet porous medi performed and the results are presented in this pape
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	Strauss, S.D.
TYPE	
ORGANIZATION	
TITLE	HOW UTILITIES RESPOND TO RADWASTE NEEDS.
PUBLISH	Power. August 1987. V. 131(8) P. 13-16.
DATE	87/08/00
ABSTRACT	Slow progress is being made toward regionalization o disposal, some states working toward regional compac others choose to go it alone. More promising is the radwaste volumes discharged from nuclear stations.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Inque, Y.; Tochiyama, O.; Tanaka, K.; Suzuki S.; Mit
TYPE	T.; Toshiaki, H.; Hara, M.
ORGANIZATION	acad Tohoku University, (Japan); Research Institute for I and other Metals.
TITLE	HYDROUS METAL-OXIDE ION-EXCHANGERS FOR THE PROCESSIN
PUBLISH	RADIOACTIVE LIQUID WASTES. Chemical Aspects of Down Stream for Thorium Fuel Cyc Japan. Atomic Energy Society of Japan. March 1987. 2
DATE	101-133.
ABSTRACT	87/03/00 Fundamental studies were made of synthetic hydrous m such as hydrous titanium oxide, hydrous tin oxide, h zirconium oxide and hydrous niobium oxide, with a vi elucidating the applicability of the materials for t
KEYWORDS	processing of radioactive liquid wastes.
LOCATION	VOLUME REDUCTION:
REFERENCE	
AUTHOR	Yamasaki, N.
TYPE	acad
ORGANIZATION	Atomic Energy Society of Japan.
TITLE	IMMOBILIZATION OF HIGH-LEVEL RADIOACTIVE WASTE BY HY
PUBLISH	HOT-PRESSING METHOD. Chemical Aspects of Down Stream for Thorium Fuel Cyc Japan. Atomic Energy Society of Japan. March 1987. 2
DATE	135-162. 87/03/00

ABSTRACT	Simulated high-level radioactive waste was solidified in a silica matrix containing low-quartz and amorphous aluminosilicate by a hydrothermal hot pressing method. Optimum conditions to produce a waste form with high strength and low leachability were determined.
KEYWORDS	VOLUME REDUCTION: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Martin, H.D.
TYPE	govt
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	IN-TANK PRECIPITATION PROCESS FOR DECONTAMINATION OF SOLUBLE RADIOACTIVE WASTE (WASTE POLICIES AND PROGRAMS FOR HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA).
DATE	1984. V. 1, p. 291-295.
ABSTRACT	84/03/00 A precipitation and adsorption process was devised to remove cesium, strontium and plutonium from water soluble, radioactive waste.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Cruickshank, A.
TYPE	acad
ORGANIZATION	
TITLE	INDIA GETS SET AT TARAPUR (VITRIFICATION PLANT).
PUBLISH	Nuclear Energy Institute. Aug. 1987. V. 32(397). p.
DATE	87/08/00
ABSTRACT	A vitrification plant has been built and commissioned to immobilize high-level radioactive waste arising from a reprocessing plant. The plant employs a semi-continuous pot-glass process, involving calcination followed by the processing vessel and subsequent casting of the storage container.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Matsuda, Masami; Funabashi, Kiyomi; Yusa, Hideo (Hitachi Ibaraki (Japan). Energy Research Lab.); Kikuchi, Makoto
TYPE	priv
ORGANIZATION	JNSTA.
TITLE	INFLUENCE OF FUNCTIONAL SULFONIC ACID GROUP ON PYROLYSIS CHARACTERISTICS FOR CATION EXCHANGE RESIN.
PUBLISH	J. Nucl. Sci. Technol. (Tokyo). (Feb 1987) 24(2):124
DATE	87/02/00
ABSTRACT	Pyrolysis of spent ion exchange resins is used to reduce radioactive waste volume and to make the final waste stable.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Oma, K.H.; Ross, W.A.; Smith, W.L.; Adams, J.R.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA); Mine Safety Appliances Co. Evans City, PA (USA).
TITLE	INNOVATIVE HEPA (HIGH-EFFICIENCY PARTICULATE AIR) FILTERS

PUBLISH	TO REDUCE WASTE GENERATION AND SIMPLIFY WASTE TREATM
DATE	Jan 1987. 10 p.
ABSTRACT	87/01/00 This study was undertaken to develop and evaluate al materials and innovative designs for HEPA filters, m more compatible with volume reduction technology.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	INVESTIGATION OF FOAMING IN LIQUID-FED MELTING OF SI NUCLEAR WASTE GLASS.
PUBLISH	American Ceramic Society Journal. May 1986. V. 69(5)
DATE	86/05/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: engineering.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	INVESTIGATION OF LEAD-IRON-PHOSPHATE GLASS FOR SRP W
PUBLISH	DOE Report DP-1729. October 1986. 66 p.
DATE	86/10/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	Resnikoff, Marvin
TYPE	assoc
ORGANIZATION	Radioactive Waste Campaign
TITLE	IS REPROCESSING A RADIOACTIVE WASTE MANAGEMENT SOLUT
PUBLISH	New York, 23pp.
DATE	
ABSTRACT	Refutes the claim that reprocessing facilitates wast and disposal. Shows that volumes of waste increase, and heat output levels are roughly comparable to the no-reprocessing option.
KEYWORDS	VOLUME REDUCTION: economics, other alternatives.
LOCATION	RWC, 625 Broadway, New York, N.Y.10012
REFERENCE	anne
AUTHOR	Kim, W.
TYPE	acad
ORGANIZATION	Florida State University, FL (USA).
TITLE	KINETIC STUDIES OF NP(VI) REDUCTION REACTIONS WITH K TROPOLONE.
PUBLISH	1987. 121 p.
DATE	87/00/00
ABSTRACT	To study the problems of potential migration of radi from a nuclear waste repository, the NP(VI) reductio with kojic acid and with tropolone were investigated level concentration of NP(VI).
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Schuelke, D.; Kniazewycz, B.G.; Markind, J.; Brossar Choi, R.C. (Northern States Power Co., Prairie Island Generating Plant, Eate, Welch, MN Post, R.G. (ed.) priv
TYPE	
ORGANIZATION	
TITLE	KLM'S BORIC ACID RECLAMATION SYSTEM (BARS). AN UPDAT
PUBLISH	P. 123-126. Waste Management '87: Waste Isolation in Technical Programs and Public Education. Tucson, AZ Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	KLM Technologies has implemented its Dept. of Energy Small Business Innovative Research (SBIR) demonstrat for a radioactive boric acid reclamation system. Pre performance indicates enhanced treatment by the BARS over state of the art process method for selective r silica and other impurities from borated water matri
KEYWORDS	VOLUME REDUCTION:
LOCATION	

REFERENCE

AUTHOR	Hoegler, J.M.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	MAGNETIC SEPARATION OF URANIUM FROM MAGNESIUM FLUORI
PUBLISH	1987. 10 p.
DATE	87/00/00
ABSTRACT	The separation of physical particles that are compri of uranium from those that are primarily magnesium b gradient are reviewed.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Blinn, K. (Kraftwerk Union Aktiegesellschaft, Offenb Germany, F.R.) Post, R.G. (ed.)
TYPE	
ORGANIZATION	
TITLE	MANAGEMENT OF LIQUID AND SOLID RADIOACTIVE WASTE FRO POWER PLANTS IN THE FEDERAL REPUBLIC OF GERMANY.
PUBLISH	P. 9-12. Waste Management '87: Waste Isolation in th Technical Programs and Public Education. Tucson, AZ. Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	For treatment of liquid waste, the main process meth German nuclear power plants are evaporation and mech filtration. An improved method, instead of a mechani is the use of centrifuges. The centrifuge system off the same decontamination factor but generates 10 tim waste.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	
TYPE	
ORGANIZATION	Systemplanung und Industrieberatung G.M.B.H., (Germany, F.R.).
TITLE	MATERIALS RECOVERY, MATERIALS UTILIZATION AND RELIEF

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

REPOSITORIES. STATUS REPORT AS OF NOVEMBER 30, 1986
March 1987. 245 p.
87/03/00

The report is a documentation of a study into the pr
requirements of the recovery of radioisotopes and ot
materials from hlw a nuclear waste reprocessing plan
possible utilization.

VOLUME REDUCTION: reprocessing.

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Furrer, J.; Krissel, R.; Liebrecht, H.; Linek, A.; H
Nemes, B.

govt

Kernforschungszentrum Karlsruhe (FRG).

MEASUREMENTS OF AEROSOL DEVELOPMENTS WHEN MIXING AND
SOLUTIONS IN REPROCESSING PLANTS.

Lectures of the 6th Status Report on the Project for
and Waste Treatment, March 13-14, 1986. 545 p. P. 23
86/03/00

Aerosol measurements were taken at the place of orig
inactive experimental plant with the aim of providin
reliable pre-calculation for planning and constructi
reprocessing plant.

VOLUME REDUCTION: design.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Marriott, R.; Henyey, F.S.; Hochstim, A.R.

METHOD FOR NET DECREASES OF HAZARDOUS RADIOACTIVE NU
MATERIALS. (THERMAL NEUTRON IRRADIATION OF LONG-LIVE
RADIONUCLIDES TO PRODUCE STABLE NUCLIDES AND SHORT-L
NUCLIDES).

26 January 1988. VP.

88/01/26

A method of decreasing the amount of relatively long
fission products in radioactive waste materials in e
that due to their natural radioactive decay, by prod
relatively short-lived radioactive nuclides and stab
from the relatively long lived fission products, is

VOLUME REDUCTION:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Colarusso, A.P.

govt

Los Alamos National Lab. NM (USA).

MOBILE NON-DESTRUCTIVE ASSAY SYSTEM.

Nucl. Mater. Manage. July 1987. V. 16 p. 375-379.

87/07/00

A mobile system for non-destructive assay developed
Alamos National Lab. provides accurate and sensitive
measurements for transuranic isotopes contained n 20
of miscellaneous nuclear wastes. These waste drums a
discussed, especially those comparing passive and ac
measurements with independent segmented gamma scan a

VOLUME REDUCTION:

AUTHOR

Heimann, R.B.; Wood, D.D.; Hamon, R.F.

TYPE
ORGANIZATION
TITLE

govt
Atomic Energy of Canada Ltd.
MULTICOMPONENT LEACH TESTS IN STANDARD CANADIAN SHIE
SOLUTION ON GLASSES CONTAINING SIMULATED NUCLEAR WAS
Mater. Res. Soc. Symp. Proc. 1984. V. 26 p. 191-200.

PUBLISH
DATE
ABSTRACT

84/00/00
Leaching experiments on borosilicate glass frit and
nuclear waste glasses were performed as a preliminar
leaching experiments on glasses incorporating radioa
VOLUME REDUCTION: glass, leaching.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Henderson, G.S.; Powell, B.M.; Sunder, S.; Vance, E.
acad/assoc
York University, (Canada); Atomic Energy of Canada L
NEUTRON AND RAMAN SCATTERING FROM NA20-AL203-
GLASSES.

PUBLISH
DATE
ABSTRACT

Phys. Chem. Glasses. Oct. 1987. V. 28(5) p. 210-213.
87/10/00
The structures of the precursor glasses of a glass c
containing sphene have been investigated. The result
investigations are discussed.
VOLUME REDUCTION: glass.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Krause, H.
govt
Kernforschungszentrum Karlsruhe (FRG).
NEW RESULTS FROM THE RESEARCH AND DEVELOPMENT WORK O
INSTITUTE FOR NUCLEAR FUEL TREATMENT TECHNOLOGY.(IN
Lectures of the 6th Status Report on the Project for
and Waste Treatment, March 13-14, 1986. 545 p.

DATE
ABSTRACT

87/04/00
Reports on the bitumenising of liquid concentrates
under thermal loading), investigations on cement pro
(chemical reactions, leaching) work on the separati
term and tranuranic nuclides from liquid waste, we
combustible waste containing PU and finally, on work
vitrification of highly active waste, the latter wit
the vitrification technique to be used at the Wacker
Reprocessing Plant.

KEYWORDS
LOCATION
REFERENCE

VOLUME REDUCTION:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Swenson, C. (West Valley Nuclear Services Co., NY)
priv
Oak Ridge National Lab. TN (USA).
OVERVIEW OF THE WEST VALLEY ENGINEERED WASTE MANAGEM
P. 297-314. Oak Ridge Model Conference: Proceedings.

DATE	87/00/00
ABSTRACT	A commercial reprocessing plant was operated at West York from 1966-1972 and reprocessed 640 tonnes of sp That activity resulted in the production of approxim cubic meters of high-level waste which is stored in tanks.
KEYWORDS	VOLUME REDUCTION: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Nikiforov, A.S.; Zakharova, K.P.; Polyakov, A.S.
TYPE	govt
ORGANIZATION	
TITLE	PHYSICOCHEMICAL FOUNDATIONS OF BITUMINIZATION OF LIQ RADIOACTIVE WASTES FROM A NUCLEAR POWER PLANT WITH R AND THE PROPERTIES OF THE COMPOUNDS FORMED.
PUBLISH	Soviet Atomic Energy. March 1987. V. 61(3) p. 664-66
DATE	87/03/00
ABSTRACT	The authors present the results of a feasibility stu bituminization of liquid radioactive effluents from RBMK reactors of the Leningrad plant.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Koegler, S.S.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	PILOT SCALE CERAMIC MELTER 1985-1986 REBUILD: NUCLEA TREATMENT PROGRAM.
PUBLISH	July 1987. 63 p.
DATE	87/07/00
ABSTRACT	The pilot scale ceramic melter was subsequently dism the damaged and corroded components were repaired or An analysis of the corrosion products and the failed indicated that the electrode bus connection welds ma failed due to a combination of chemical and mechanic
KEYWORDS	VOLUME REDUCTION: corrosion.
LOCATION	
REFERENCE	
AUTHOR	Madic, C.; Sontag, R.
TYPE	
ORGANIZATION	CEA Centre D'Etudes Nucleaires de Fontenay-aux-Roses
TITLE	PRELIXE PROTOTYPE REPROCESSING UNIT FOR IRRADIATING CONTAMINATED WITH ALPHA EMITTERS.
PUBLISH	1987. 4 p.
DATE	87/00/00
ABSTRACT	A large number of hot cells are employed for researc fuel reprocessing and the production of isotope of t elements. This process can be considered as an alter process to incineration for the reprocessing of soli
KEYWORDS	highly contaminated with alpha, beta, gamma emitters
LOCATION	VOLUME REDUCTION:
REFERENCE	
AUTHOR	Gibson, M.W.; Gerboth, D.M.; Peters, B.B.

TYPE	govt
ORGANIZATION	Rockwell Hanford Operations. WA (USA).
TITLE	PRETREATMENT OF HANFORD PUREX PLANT FIRST-CYCLE WASTE
PUBLISH	Waste Management '87: Waste Isolation in the US, Tech Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 603-608.
DATE	87/00/00
ABSTRACT	A process has been developed to pretreat neutralized high-level waste from the fuels reprocessing facility at Hanford site. The process separates solids from the liquid, which contains soluble salts.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Fromm, R.; Holler, E.
TYPE	govt
ORGANIZATION	Kernforschungszentrum Karlsruhe (FRG).
TITLE	PROCESS MONITORING SYSTEM FOR THE V-W1 VITRIFICATION
PUBLISH	Lectures of the 6th Status Report on the Project for and Waste Treatment, March 13-14, 1986. 545 p. p. 44
DATE	86/03/00
ABSTRACT	The process monitoring system described here provides an instrument which should make it possible for the operator to operate the process of simulated vitrification in the most possible way.
KEYWORDS	VOLUME REDUCTION: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Howden, M.; Moulding, T.L.J. (British Nuclear Fuels, Risley, UK)
TYPE	priv
ORGANIZATION	Societe Francaise D'Energie Nucleaire, Paris, (France)
TITLE	PROGRESS IN THE REDUCTION OF LIQUID RADIOACTIVE DISCHARGE AT THE SELLAFIELD SITE (223).
PUBLISH	P. 1045-1054. Recod 87. Nuclear Fuel Reprocessing and Waste Management. Volume 3. Paris, France. Societe Francaise D'Energie Nucleaire. 1987. 391 p.
DATE	87/00/00
ABSTRACT	Prior to reprocessing, fuel is stored in ponds. Storage ponds and subsequent reprocessing result in the generation of liquid effluents. The highly active liquids are stored in stainless steel tanks and will be converted into glass for long term storage and disposal.
KEYWORDS	VOLUME REDUCTION: disposal and storage alternatives.

LOCATION	
REFERENCE	
AUTHOR	Gilbert, E.R.; Campbell, T.K.; Thornhill, C.K.; Pieper
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	PROGRESS OF AIR OXIDATION TEST ON SPENT LIGHT-WATER REACTOR FUEL IN AN IMPOSED GAMMA FIELD.
PUBLISH	April 1987. 16 p.
DATE	87/04/00
ABSTRACT	The spent fuel oxidation program at Pacific Northwest is directed towards providing a data base for the oxidation behavior of spent light-water reactor fuel.
KEYWORDS	VOLUME REDUCTION: disposal and storage alternatives.
LOCATION	

REFERENCE	
AUTHOR	Weber, W.J.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	RADIATION EFFECTS IN NUCLEAR WASTE GLASSES.
PUBLISH	June 1987. 33 p.
DATE	87/06/00
ABSTRACT	The effects of radiation from alpha and beta decay o performance and properties of borosilcate nuclear wa are reviewed and discussed.
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	Bailey, G. (UKAEA Dounreay Nuclear Power Development Establishment).
TYPE	
ORGANIZATION	
TITLE	RADIOACTIVE WASTE MANAGEMENT AT DOUNREAY.
PUBLISH	Radioact. Waste Manag. Nucl. Fuel Cycle. December 19 P.27-50.
DATE	87/12/00
ABSTRACT	The author describes the reprocessing plant at Dounr
KEYWORDS	VOLUME REDUCTION: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Merz, E.
TYPE	govt
ORGANIZATION	Kernforschungsanlage Juelich M.B.H. (FRG).
TITLE	RADIOACTIVE WASTE MANAGEMENT. WASTE FORMS OF HIGH-LE RADIOACTIVE WASTES FROM REPROCESSING.
PUBLISH	Oct. 1987. 111 p.
DATE	87/10/00
ABSTRACT	General information about radioactive waste is follo discussion on the internationally favoured vitrifica
KEYWORDS	high-level waste.
LOCATION	VOLUME REDUCTION: safety analysis, chemistry, waste
REFERENCE	
AUTHOR	Kuribayashi, H.; Koshiha, Y.; Suzuki, K.; Shibuya, M Japan)
TYPE	Post, R.G. (ed.)
ORGANIZATION	priv
TITLE	RADIONUCLIDE SEPARATION PROCESS (RASEP).
PUBLISH	P. 89-92. Waste Management '87: Waste Isolation in t Technical Programs and Public Education. Tucson, AZ. Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Liquid radwaste generated from nuclear power plants nuclear facilites consists of a small amount of radi nuclides and a large amount of non-radioactive matte separating the two, original liquid radwaste can be reduced in volume and a large portion of it can be r non-radioactive waste.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Carvalho, E.I. de; Yamura, M.; Matsuda, H.T.; Araujo
TYPE	Araujo, B.F. de (Inst. de Pesquisas Energeticass e N
ORGANIZATION	Sao Paulo, Brazil)
TITLE	Associacao Brasileira de Energia Nuclear, Rio de Jar
PUBLISH	(Brazil).
DATE	RECOVERY OF TRANSURANIUM ELEMENTS IN TRACER LEVEL OF
ABSTRACT	WASTES. (in Portugese)
KEYWORDS	P.243-250. Proceedings of the 2. General Congress of
LOCATION	Energy- V.2. 1988. 498 p.
REFERENCE	88/00/00
	A procedure for recovery of transuranium elements fr
	solid waste is presented. The process is safe, relia
	useful for environmental and waste treatment applica
	VOLUME REDUCTION:

AUTHOR	Campbell, D.O.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	RECOVERY, CONCENTRATION, AND SOLIDIFICATION OF EUROPE
PUBLISH	EXCHANGE FROM A DILUTE PROCESS STREAM.
DATE	December 1987. 27 p.
ABSTRACT	8/12/00
	A promising process to recover americium from a very
	solution and convert it to a stable solid suitable f

KEYWORDS	disposal is to load the americium onto organic ion-ex
LOCATION	resins and burn the resins to yield a granular solid
REFERENCE	disposed of directly or formed into a monolith using
	solidification processes.
	VOLUME REDUCTION:

AUTHOR	Napier, J.M.; Kosinski, F.E.
TYPE	govt
ORGANIZATION	Oak Ridge Y-12 Plant. TN (USA).
TITLE	RECYCLE AND BIODESTRUCTION OF HAZARDOUS NITRATE WAST
PUBLISH	12 Jan 1987. 15 p.
DATE	87/01/12
ABSTRACT	The uranium recycle operation uses nitric acid in a
	extraction purification process, and a waste stream
	nitric acid and other impurities is generated. In 19
	processes were developed and installed to recycle 50
	wastes and to biologically decompose the rest of the
	VOLUME REDUCTION: waste management.
KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	REDOX CHARACTERIZATION OF SIMULATED NUCLEAR WASTE GL
PUBLISH	American Ceramic Society Journal. May 1986. V69(5) p
DATE	86/05/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: radionuclide migration.
LOCATION	
REFERENCE	

AUTHOR	Harjula, R.; Lehto, J.; Wallace, J. (Dept. of Radioc
	Univ. of Helsinki, Helsinki, Finland.)
	Post, R.G. (ed.)
TYPE	acad
ORGANIZATION	
TITLE	REMOVAL OF CESIUM FROM NUCLEAR WASTE SOLUTIONS BY PO
	COBALT HEXACYANOFERRATE (II) COLUMNS.
PUBLISH	P. 93-96. Waste Management '87: Waste Isolation in t
	Technical Programs and Public Education. Tucson, AZ.
	Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Removal of /SUP 137/Cs from nuclear power plant wast
	by ion exchange using potassium cobalt hexacyanoferr
	were studied.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	
TYPE	
ORGANIZATION	
TITLE	REMOVAL OF RADIOACTIVE CONTAMINANTS FROM WEST VALLEY
	STREAMS USING NATURAL ZEOLITES.
PUBLISH	Environmental Progress. May 1987. V. 6(2) p. 104-110
DATE	87/05/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Deshmukh, U.A.
TYPE	govt
ORGANIZATION	Bhabha Atomic Research Center. (India).
TITLE	REMOVAL OF RADIONUCLIDES FROM LIQUID STREAMS BY REVE
PUBLISH	Applied Radiation Isotopes. 1987. V. 38(11) p. 971-9
DATE	87/00/00
ABSTRACT	Separation of radionuclides in trace concentrations
	acetate membranes has been under investigation in th
	laboratory, and the behaviour of some important radi
	such as 137Cs and 90Sr under reverse osmosis has bee
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	
TYPE	priv/govt
ORGANIZATION	Environment Canada. (Canada).
TITLE	REMOVAL OF RADIUM-226 FROM URANIUM MINING EFFLUENTS;
	JOINT GOVERNMENT-INDUSTRY PROGRAM. (EPS 3/HA/3).
PUBLISH	Ottawa. 1984. 32 p.
DATE	84/00/00
ABSTRACT	Reports the results of tests carried out on radium r
	mining effluents.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Mueller Von Blumencron, H.
TYPE	govt
ORGANIZATION	Kernforschungszentrum Karlsruhe (FRG).

TITLE	REPORT ON REPROCESSING PLANT AT WACKERSDORF. (IN GE
PUBLISH	Lectures of the 6th Status Report on the Project fo
DATE	and Waste Treatment, March 13-14, 1986. 545 p.
ABSTRACT	87/04/00
	The present state of planning and the authorisation
	building the German reprocessing plant in Wackersdo
	described.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Kroebel, R. (Kernforschungszentrum Karlsruhe G.M.B.H.)
TYPE	F.R., Projekt Wiederaufarbeitung und Abfallbehandlung
ORGANIZATION	
TITLE	REPROCESSING AND RECYCLING - PROCESSES, ECONOMICS, A
	REPORT ABOUT THE INTERNATIONAL CONFERENCE ON REPROCI
	NUCLEAR FUELS AND TREATMENT OF RADIOACTIVE WASTE HEI
	(in German)
PUBLISH	Atomwirtsch., Atomtech. December 1987. V.32(12) P.58
DATE	87/12/00
ABSTRACT	Published in summary form only.
KEYWORDS	VOLUME REDUCTION: reprocessing, economics.
LOCATION	
REFERENCE	

AUTHOR	Mogg, S.; Howarth, G.G.
TYPE	govt
ORGANIZATION	British Nuclear Fuels PLC. (UK).
TITLE	REPROCESSING AND WASTE MANAGEMENT IN THE UK.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec
	Programs and Public Education. Tucson, AZ, (USA). Un
	Arizona Nuclear Engineering Dept. 1987. p. 109-116.
DATE	87/00/00
ABSTRACT	This paper surveys progress in irradiated fuel repro
	waste management at the BNFL Sellafield site.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	

AUTHOR	Goldsmith, Edward; Bunyard, Peter; Hilyard, Nicholas
TYPE	media
ORGANIZATION	Wadebridge Ecological Centre. (UK).
TITLE	REPROCESSING THE TRUTH.
PUBLISH	The Ecologist, 8pp.
DATE	
ABSTRACT	Shows that reprocessing would contribute to radioact
	of the environment. Questions the ICRP emissions st
	the basis of recent evidence indicating that the dos
	relationship is not linear at low doses. Also quest
	aspects of British nuclear industry's philosophy on
	Fast breeders and reprocessing are a costly option,
	costs after reprocessing may be double that of dispo
	reprocessing
KEYWORDS	VOLUME REDUCTION: economics, disposal and storage al
LOCATION	Worthyvale Manor, Camelford, Cornwall, PL32 9YY, U.K
REFERENCE	anne

AUTHOR	Bourgeois, M.; Arod, J.; Baudin, G.; Rouyer, H.
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)

TITLE	RESEARCH AND DEVELOPMENT RELATING TO REPROCESSING AN
PUBLISH	THE COMMISSARIAT A L'ENERGIE ATOMIQUE. Proceedings of an International Symposium on the Back Nuclear Fuel Cycle: Strategies and Options. Jointly the International Atomic Energy Agency and the Nuclear Agency of the OECD and held in Vienna, 11-15 May 1987/05/00
DATE	87/05/00
ABSTRACT	A summary of R & D done at the CEA on reprocessing a presented.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	media
ORGANIZATION	News & Comment. (USA).
TITLE	SAVANNAH RIVER'S \$1-BILLION GLASSMAKER.
PUBLISH	Science. Vol 235. March 1987.
DATE	87/03/00
ABSTRACT	This paper discusses the work taking place at Savannah involving the placement of nuclear waste in glass.
KEYWORDS	VOLUME REDUCTION: siting.
LOCATION	
REFERENCE	NFW 2.2-27-1
AUTHOR	Bruggeman, A.
TYPE	govt
ORGANIZATION	SCK/CEN (Belgium).
TITLE	SEPERATION OF TRITIUM FROM AQUEOUS EFFLUENTS.
PUBLISH	CEC Report EUR 9107 EN. 1984. 88 p.
DATE	84/00/00
ABSTRACT	The volume of tritiated aqueous effluents may be reduced 3 cu m/ton of LWR fuel processed in the future by re waste streams and decontamination process reagents. reduction of waste volume may be required to minimize disposal costs.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	SODIUM WASTE TECHNOLOGY - A SUMMARY REPORT.
PUBLISH	ANL Report 86-50. January 1987. 77 p.
DATE	87/01/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: waste management.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt

ORGANIZATION	Ontario Hydro. (Canada).
TITLE	SOLIDIFICATION OF LIQUID WASTE FROM THE FREON BASED PROCESS.
PUBLISH	1985. 10 P.
DATE	85/00/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Miyao, H.; Hino, S.; Sakuma, A; Nakashima, T.; Beuke
TYPE	Averbeke, J.
ORGANIZATION	priv/govt
	Power Reactor and Nuclear Fuel Development Corp., (J
	Corp., (Japan).; Societe Belge pour Lindustrie Nucle
	(Belgium).
TITLE	SOLIDIFYING LIQUIDS AND SLUDGES FROM A REPROCESSING
PUBLISH	Nuclear Energy Institute. Aug. 1987. V32(397) p.54.
DATE	87/08/00
ABSTRACT	Japan's Power Reactor and Nuclear Fuel Development C
	solidifying concentrates and chemical sludges from t
	Tokai-Mura reprocessing plant in a process consistir
	chemical pre-treatment by co-precipitation and PII a
	followed by evaporation and incorporation into liqui
	in a four screw extruder evaporator.
KEYWORDS	VOLUME REDUCTION: chemistry.
LOCATION	
REFERENCE	
AUTHOR	Dippold, D.G.; Wampler, J.
TYPE	govt
ORGANIZATION	Battelle Pacific Northwest Lab. WA (USA).
TITLE	SPENT FUEL BURNUP AND AGE: IMPLICATIONS FOR THE DESI
	OF A WASTE DISPOSAL SYSTEM.
PUBLISH	Battelle Memorial Institute Report ONWI-561. Decembe
	p.
DATE	84/12/00
ABSTRACT	LWR fuel burnup and waste age have important implica
	design and cost of a waste disposal system. A design
	analysis for nine boundary cases, representing three
	values and three waste ages, is detailed.
KEYWORDS	VOLUME REDUCTION: design.
LOCATION	
REFERENCE	
AUTHOR	Williams, K.L.
TYPE	
ORGANIZATION	
TITLE	SPENT FUEL TREATMENT TO ALLOW STORAGE IN AIR.
PUBLISH	Proceedings of the Symposium on Waste Management. Tu
	Arizona. Feb 3-March 28, 1988. V. II - High-level Wa
	General Interest. p. 993-998.
DATE	88/03/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: disposal and storage alternatives.
LOCATION	
REFERENCE	
AUTHOR	Izumida, T.; Kawamura, F.; Chino, K.; Kikuchi, M. (H

TYPE	Energy Research Lab., Ibaraki, Japan)
ORGANIZATION	priv
TITLE	STABILITY OF CEMENT-GLASS PACKAGES CONTAINING SODIUM
PUBLISH	GENERATED FROM PRESSURIZED WATER REACTOR POWER PLANT
DATE	Nucl. Technol. August 1987. V. 78(2) P. 185-190.
ABSTRACT	87/08/00 A new solidification technique using cement-glass, w mixture of sodium silicate and cement, was studied f solidification of sodium borate salt of liquid waste from pressurized water reactor plants.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Cross, J.E.; Holwell, G.J.; Hooper, E.W.
TYPE	
ORGANIZATION	UKAEA Harwell Lab. Chemistry Div.; Department of the
TITLE	London (UK).
PUBLISH	SUMMARY OF EXPERIMENTAL WORK DURING 1986/87 ON ACTIN
DATE	DECONTAMINATION TO LOW-LEVELS.
ABSTRACT	September 1987. 11 p. 87/09/00 The results from a preliminary experimental investig treatment processes for the decontamination of alpha waste effluents to very low-levels are reported.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Borisch, R.R.; Marchett, S.
TYPE	priv
ORGANIZATION	West Valley Nuclear Services Co. NY (USA).
TITLE	SUPERNATANT TREATMENT OF THE FINAL DECONTAMINATION M
PUBLISH	SUPERNATANT TREATMENT SYSTEM: PROGRESS REPORT FOR TH
DATE	MARCH 1982-SEPT. 1987.
ABSTRACT	Feb. 1987. 63 p. 87/02/00 As part of the West Valley demonstration project the supernatant stored in tank 8D-2 will be partially de before encapsulation in the final glass form. This discusses selection of a method for removing CS-137, radioactive ion in the supernatant.
KEYWORDS	VOLUME REDUCTION: glass.
LOCATION	
REFERENCE	
AUTHOR	Engelmann, C.
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	TESTING AND EVALUATION OF SOLIDIFIED HIGH-LEVEL WAST
PUBLISH	Joint Annual Progress Report 1982. 233 p.
DATE	84/00/00
ABSTRACT	
KEYWORDS	VOLUME REDUCTION: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Pentinghaus, H.
TYPE	govt
ORGANIZATION	Kernforschungszentrum Karlsruhe (FRG).

TITLE	THE CHEMISTRY OF VITRIFICATION OF HLW.
PUBLISH	Lectures of the 6th Status Report on the Project for and Waste Treatment, March 13-14, 1986. 545 p. p. 1.
DATE	86/03/00
ABSTRACT	The process provided for the vitrification of highly waste solutions from the planned Wackersdorf reproco is a single stage smelting process, based on a ceram furnace fed with liquid, using boron silicate glass have been performed.
KEYWORDS	VOLUME REDUCTION: chemistry, ceramics.
LOCATION	
REFERENCE	
AUTHOR	anon
TYPE	
ORGANIZATION	
TITLE	THE CLEAN-UP OF FUSION REACTOR WASTE GASES: A STUDY EFFECTS OF IMPURITIES ON SILVER-PALLADIUM.
PUBLISH	Platinum Metals Review. Jan. 1989. V. 33(1) p. 9.
DATE	89/01/00
ABSTRACT	The use of palladium-alloy membrane for the purification fusion reactor feed gas is discussed. Hydrogen isotopes separated from impurities in the exhaust by diffusion through the membrane. The temperature limits within operation is feasible are 475-650K.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Wieczorek, H.; Oser, B.
TYPE	govt
ORGANIZATION	Kernforschungszentrum Karlsruhe (FRG).
TITLE	THE DEVELOPMENT AND ACTIVE DEMONSTRATION OF THE PROCESS OF WASHING OF COMBUSTIBLE WASTE CONTAINING PLUTONIUM.
PUBLISH	Lectures of the 6th Status Report on the Project for and Waste Treatment, March 13-14, 1986. 545 p. p. 18
DATE	86/03/00
ABSTRACT	The Karlsruhe Nuclear Research Centre proved, through with Pu wet ashing, the suitability of the process for dealing with treating combustible waste containing plutonium.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	G.; Blanchon, T.; Lenail, B.
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	THE FRENCH PROGRAMME FOR THE BACK END OF THE NUCLEAR FUEL CYCLE
PUBLISH	Proceedings of an International Symposium on the Back End of the Nuclear Fuel Cycle: Strategies and Options. Jointly organized by the International Atomic Energy Agency and the Nuclear Energy Agency of the OECD and held in Vienna, 11-15 May 1987.
DATE	87/05/00
ABSTRACT	France is firmly committed to immediate reprocessing of spent nuclear fuel. The programme is described in this report.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Lewiner, C. (Electricite de France, Paris, France. F

TYPE	Gloaguen, A. (Electricite de France, Paris, France, Branch)
ORGANIZATION	govt
TITLE	THE FRENCH REPROCESSING PROGRAM. NUCLEAR FUEL CYCLE.
PUBLISH	Atomwirtsch., Atomtech. May 1988. V.33(5) p. 227-229
DATE	88/05/00
ABSTRACT	Reprocessing spent fuel elements in France is based and development program launched in 1949 by installa CEA.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Ducos, O.; Delafontaine, G.; Mistral, J.P.; Puigredo (Compagnie Generale des Matieres Nucleaires, Bagnols France)
TYPE	
ORGANIZATION	Societe Generale D'Energie Nucleaire, Paris, (France
TITLE	THE LIQUID EFFLUENT PROCESSING PLANT OF MARCOULE. (i
PUBLISH	P. 139-145. Recod 87. Nuclear Fuel Reprocessing and Management Vol. 1. Paris, France. Societe Francaise Nucleaire. 1987. 492 p.
DATE	87/00/00
ABSTRACT	Radioactive liquid effluents on the site of Marcoule collected in a sewage system, decontaminated for dis Rhone river and solid residues are encapsulated in b
KEYWORDS	decontamination processes and conditioning in bitume described and performance given.
LOCATION	VOLUME REDUCTION:
REFERENCE	
AUTHOR	Nannicini, R.; Dworschak, H.; Daniele, F.
TYPE	govt
ORGANIZATION	Enea, Rome.
TITLE	THE R & D ACTIVITIES CARRIED OUT IN ISPRA ACCORDING COOPERATION BETWEEN ENEA AND JRC ISPRA IN THE FIELD RADIOACTIVE WASTE MANAGEMENT.
PUBLISH	1987. 19 p.
DATE	87/00/00
ABSTRACT	The R & D activities, carried out in Ispra sine 1984 the technological development laboratory, concerned with final hot tests of the Enea owned ester mini-pi for hlw vitrification.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	Hladik, O.; Bernhard, G.; Boessert, W.; Grahnert, T. (Zentralinstitut fuer Kernforschung, Rossendorf Bei German Democratic Republic)
TYPE	
ORGANIZATION	
TITLE	THE RECOVERY OF URANIUM FROM THE WASTE SOLUTION OF F PRODUCTION.
PUBLISH	Appl. Radiat. Isol. 1987. V.38(8) P.619-622.
DATE	87/00/00
ABSTRACT	A procedure is described for the solvent extraction uranium from the waste solution of fission 99mo prod
KEYWORDS	VOLUME REDUCTION: reprocessing.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE

govt

THE SEGREGATION OF TRANSURANIC WASTE AT THE DEPARTMENT OF ENERGY'S ROCKY FLATS PLANT, GOLDEN, COLORADO.
DOE Report IG-0216. March 6, 1985. 8 p.
85/03/06
Activities undertaken at the DOE Rocky Flats Plant, quantities of transuranic waste generated, are reported.
VOLUME REDUCTION:

acad

ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

THE TREATMENT AND CONDITIONING OF TRANSURANIC ELEMENTS IN THE FEDERAL REPUBLIC OF GERMANY.
Radioactive Waste Management & the Nuclear Fuel Cycle. 1986. V. 7(2) P. 139-151.
86/08/00

VOLUME REDUCTION:

THE TRUEX PROCESS FOR RECOVERY OF PLUTONIUM AND AMERICIUM FROM NITRIC ACID WASTE SOLUTIONS: CONTINUING DEVELOPMENT.
DOE Report ANL-87-3. March 1987. 125 p.
87/03/00

VOLUME REDUCTION:

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Peterson, S.; Hedin, G. (Nuclear Waste Engineering, Sweden); Post, R.G. (ed.).

THE WOX PROCESS - NEW VOLUME REDUCTION TECHNOLOGY FOR HIGH-LEVEL WASTE.
P. 665-670. Waste Management '87: Waste Isolation in the Technical Programs and Public Education. Tucson, AZ. of Arizona Nuclear Engineering Dept. 1987.
87/00/00

The obtained volume reduction cement solidification, reduction factor of 15, can be achieved by the new WOX process.
VOLUME REDUCTION:

AUTHOR
TYPE
ORGANIZATION
TITLE

Nikiforov, A.S.; Aloj, A.S.; Dolgov, V.V. (and others)

TREATMENT OF HIGH-LEVEL RADIOACTIVE WASTES PRODUCED

PUBLISH
DATE
ABSTRACT

PROCESS OF NUCLEAR FUEL REPROCESSING. (in Russian)
At. Ehnerg. November 1987. V. 63(5) P. 319-323.
87/11/00

A review of works on the development of equipment and technological layouts for high-level radioactive waste solidification is presented.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Hillmer, T.P.; Doyle, R.D. (Arizona Nuclear Power Project, Phoenix, AZ)
Post, R.G. (ed.)

TYPE
ORGANIZATION
TITLE

USE OF VOLUME REDUCTION AND SOLIDIFICATION SERVICES IN NUCLEAR POWER PROJECTS PALO VERDE NUCLEAR GENERATING PLANT. P. 681-686. Waste Management '87: Waste Isolation in Technical Programs and Public Education. Tucson, AZ. Arizona Nuclear Engineering Dept. 1987.

PUBLISH

DATE
ABSTRACT

87/00/00
The first liquid waste transportable volume reduction solidification system began processing of radioactive waste in August 1986 at the Palo Verde Nuclear Generating Station. This paper summarizes the operation of the system during the first campaign.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Alexandre, D. (Compagnie Generale des Matieres Nucleaires, Cogema, Centre de la Hague, Cherbourg, France); Chot, J. (Compagnie Generale des Matieres Nucleaires, Centre de Marcoule, Bagnols sur Ceze, France); Le Blaye, G. (Societe Generale pour les Techniques Nouvelles S.G.N., Saint Yvelines, France)

TYPE
ORGANIZATION
TITLE

Societe Francaise D'Energie Nucleaire, Paris, (France). VITRIFICATION OF FISSION PRODUCT WASTES: INDUSTRIAL AND CONSTRUCTION OF THE NEW VITRIFICATION UNITS AT LA Hague. P. 289-296. Recod 87. Nuclear Fuel Reprocessing and Management Vol. 1. Paris, France. Societe Francaise Nucleaire. 1987. 492 p.

DATE
ABSTRACT

87/00/00
This paper presents the sustained throughput performance achieved during 9 years operation of the continuous vitrification line at Marcoule, plus information on technologies, maintenance, process effluents and safety.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Kaufman, F.; Wiese, H. (Deutsche Gesellschaft fuer Wiederaufarbeitung von Kernbrennstoffen, Hannover, G.F.R.)

TYPE
ORGANIZATION
TITLE
PUBLISH

Societe Francaise D'Energie Nucleaire, Paris, (France). VITRIFICATION OF HIGH-LEVEL LIQUID WASTE. P. 27-288. Recod 87. Nuclear Fuel Reprocessing and Waste Management Vol. 1. Paris, France. Societe Francaise Nucleaire. 1987. 492 p.

DATE
ABSTRACT

87/00/00

The construction of the Pamela vitrification plant at Belgoprocess site in Mol/Belgium was completed in late 1984. After one year of cold test campaigns with simulated waste solution, the plant was put into radioactive operation in 1985. Up to now, more than 140 M3 of high-level liquid waste has been treated.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Hoehlein, G.M.; Weisenburger, S.
govt

Kernforschungszentrum Karlsruhe (FRG).

VITRIFICATION OF HIGHLY RADIO-ACTIVE FISSION PRODUCTS IN A DIRECTLY HEATED CERAMIC SMELTER.

PUBLISH

Lectures of the 6th Status Report on the Project for the Waste and Waste Treatment, March 13-14, 1986. 545 p. p. 13-14.

DATE
ABSTRACT

86/03/00

The erection of the pilot plant at MOL for producing vitrified waste capable of being stored at the Erochemic reprocessing plant at MOL in Belgium was completed in 1984. A report on the experience gained in the vitrification of highly radioactive waste solutions is presented.

VOLUME REDUCTION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Munz, R.J.; Chen, G.Q.
acad

McGill University. Dept. of Chemical Engineering. (Canada)
VITRIFICATION OF NUCLEAR WASTE IN A TRANSFERRED ARC PLASMA MELTER.

PUBLISH

Journal of Nuclear Materials. Feb. 1989. V. 161(2).

DATE
ABSTRACT

89/02/00

Borosilica glass, high silica glass, and a variety of other glass-ceramic synrock have been melted in a batch transfer arc plasma melter. Simulated nuclear waste was also melted in borosilicate glass and high silica glass and sphene glass-ceramic. The results are discussed.

VOLUME REDUCTION: glass.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Ashby, P.J.; Greenfield, B.F.; Sexon, T.; Wilkins, J.
govt

Urea Harwell Lab. (UK).

WASHING OF PLUTONIUM CONTAMINATED COMBUSTIBLE MATERIALS OF AQUEOUS EFFLUENTS AND FURTHER WASHING STUDIES.

PUBLISH
DATE
ABSTRACT

Aug. 1987. 39 p.

87/08/00

The results of further trials of the washing process

KEYWORDS	decontamination of combustible plutonium contaminate
LOCATION	are described.
REFERENCE	VOLUME REDUCTION:
AUTHOR	Ashbrook, A.W. (Eldorado Resources Ltd., Ottawa).
TYPE	govt
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	WASTE MANAGEMENT IN THE REFINING AND CONVERSION OF U
PUBLISH	CANADA.
	P. 157-165. Advances in Uranium Refining and Convers
	Proceedings of a Technical Committee Meeting held in
	7-10 April 1986. May 1987. 287 p.
DATE	87/05/00
ABSTRACT	This paper addresses the approach, the successes or
	that Eldorado has had in this endeavor to maximise,
	reuse process wastes.
KEYWORDS	VOLUME REDUCTION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad/media
ORGANIZATION	
TITLE	WEST VALLEY PROJECT PROVING THAT NUCLEAR WASTE CAN B
	SAFELY.
PUBLISH	Energy Business. Spring 1985. V. 7(1). p. 14-19.
DATE	85/05/00
ABSTRACT	With the preliminary testing of a glass melter design
	solidify high-level radioactive waste, the West Vall
	Demonstration Project has taken an important step in
	demonstrating how such wastes can be safely processe
	disposal.
KEYWORDS	VOLUME REDUCTION: disposal and storage alternatives,
LOCATION	
REFERENCE	
AUTHOR	Boyle, Stewart; Russell-Jones, Robin
TYPE	assoc
ORGANIZATION	Friends of the Earth. (U.K.).
TITLE	WHAT PRICE WINDSCALE?
PUBLISH	FOE Trust, E-42, London, 1985,70pp.
DATE	85/00/00
ABSTRACT	Examines the true cost of reprocessing, including re
	reprocessing, waste management issues, alternatives
	socio-economic issues. Also contains a critique of
	Report on leukaemia clusters in Britain.
KEYWORDS	VOLUME REDUCTION: economics, other alternatives, hea
LOCATION	FOE Trust, 26-28 Underwood St. London, N1 7JQ, U.K.
REFERENCE	anne
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	Oak Ridge Y-12 Plant, TN, (USA).
PUBLISH	Y-12 PLANT WASTE MINIMIZATION STRATEGY.
DATE	2 October 1987. 16 p.
ABSTRACT	87/10/02
	This report focusses on the Y-12 plant's strategy to
	comprehensive waste minimization program. This appro

AUTHOR	Maynes, Clifford
TYPE	assoc
ORGANIZATION	Nuclear Awareness Project
TITLE	(Canada).AR POWER BOOKLET.
PUBLISH	N.A.P, Oshawa, 1988, 48pp.
DATE	88/00/00
ABSTRACT	An overview on the nuclear fuel chain in Canada, with reference to Ontario. Considers the fuel chain as a system, of which waste disposal and management are a part. Companion to The Nuclear Power Show, an audio-visual presentation on the health and environmental issues with nuclear power, energy conservation, and alternative nuclear economics, and the connections with nuclear power. Suitable for high-school students and the general public.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: waste management, education.
LOCATION	N.A.P. P.O.Box 2331, Oshawa, Ontario L1H 7V4
REFERENCE	NFW 2.2-30-3

AUTHOR	
TYPE	priv
ORGANIZATION	Growth Strategies Organization, Mountain West Research
TITLE	ASSESSMENT OF THE IMPACT OF A NUCLEAR WASTE REPOSITORY AT YUCCA MOUNTAIN ON THE ECONOMIC DEVELOPMENT POTENTIAL OF LINCOLN COUNTY AND THE SURROUNDING AREA.
PUBLISH	Task 8.1.6 Phase 4-A, Yucca Mountain Socio-economic Assessment, Mountain West Research, 1989, 12pp.
DATE	89/01/00
ABSTRACT	In order to measure the impact of siting a high-level nuclear waste repository at Yucca Mountain, a baseline study reflecting the area's competitiveness as a business centre into the future is desirable. Several factors point to a likely measure of commercial success in the coming years, and some factors are possible. A repository facility would have several impacts on this business climate, especially with respect to the image of the area, transportation and perceived risk.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	NFW 2.2-30-1

AUTHOR	
TYPE	assoc/media
ORGANIZATION	Wadebridge Ecological Centre.
TITLE	CHERNOBYL, THE END OF NUCLEAR POWER?
PUBLISH	The Ecologist, Vol.16, no.4/5, 1986
DATE	86/00/00
ABSTRACT	Special issue of The Ecologist dealing with many aspects of nuclear power, including nuclear waste, reprocessing, effects of radiation, reactor safety, potential for alternatives.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: safety analysis
LOCATION	Worthyvale Manor, Camelford, Cornwall, PL32 9TT, U.K.

REFERENCE	NFW 2.2-30-4
-----------	--------------

AUTHOR	Devin, Delbert
TYPE	assoc

ORGANIZATION TITLE	Serious Texans Against Nuclear Dumping (STAND). COMMENTS ON THE DRAFT ENVIRONMENTAL ASSESSMENT FOR S COUNTY.
PUBLISH DATE ABSTRACT	1985? 5pp. 85/00/00 Details several important factual inaccuracies in DO Environmental Assessment document, relating to agric geography, water resources. Leads to mistrust of DO published information.
KEYWORDS LOCATION REFERENCE	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: public partic STAND, Rt. 2, Box 28, Tulia, Texas 79088 anne
AUTHOR TYPE ORGANIZATION TITLE	Filby, R.H.; Stohr, J.S. assoc Hanford Historical Documents Review Committee. WA (U ENVIRONMENTAL AND HEALTH STUDIES OF POTENTIAL IMPACT HANFORD OPERATIONS.
PUBLISH DATE ABSTRACT	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 347-350. 87/00/00 This paper summarizes investigations and historical the Hanford reservation.
KEYWORDS LOCATION REFERENCE	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: native.
AUTHOR TYPE ORGANIZATION TITLE	anon HIGHER REGIONAL COURT CELLE, JUDGEMENT OF DECEMBER 9 (LEGAL TERM OF RADIOACTIVE WASTE).
PUBLISH DATE ABSTRACT	Neue Jurist. Wochenschr. May 20, 1987. V. 40(21) p. 87/05/20 In its decision of December 9, 1986, the higher regi Celle deals with the legal term of radioactive waste
KEYWORDS LOCATION REFERENCE	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: waste charact
AUTHOR TYPE ORGANIZATION TITLE	Gray, S.; Boryczka, M.; Hines, B. acad IMPACT ANALYSIS AND COMMUNITY DEVELOPMENT NEEDS AT T WASTE MANAGEMENT '84.
PUBLISH	Proceedings of the Symposium on Waste Management, Vo 11-15, 1984. p. 195-198.
DATE ABSTRACT KEYWORDS LOCATION REFERENCE	84/00/00 SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
AUTHOR TYPE ORGANIZATION TITLE	Hendrickson, P.L.; Scott, M.J.; Mullen, M.F.; Nichol govt Pacific Northwest Lab. WA (USA). IMPACT OF PROPOSED FINANCIAL ASSURANCE REQUIREMENTS MATERIALS LICENSEES.
PUBLISH DATE	Sept. 1987. 135 p. 87/09/00

ABSTRACT

The NRC is considering a possible rulemaking that would require certain nuclear materials licensees to demonstrate their ability to clean up accidental releases of radioactive materials. The rulemaking would potentially affect a total of 16,350 NRC and agreement state licensees. Specific topics examined in the report include: characteristics of potentially affected licensees; the availability and cost of various financial assurance mechanisms; the financial impact on licensees; the cost of administering a financial assurance fund; and, overall benefits and costs.

KEYWORDS
LOCATION
REFERENCE

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: licensing, economic

AUTHOR

Branch, K.M.; Cluett, C.; Page, T.L. (Battelle Human Research Centers, Seattle, WA); Post, R.G. (ed.).

TYPE
ORGANIZATION
TITLE
PUBLISH

INTEGRATING ENVIRONMENTAL AND SOCIO-ECONOMIC ASSESSMENT
P.125-130. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ: Arizona Nuclear Engineering Dept. 1987.

DATE
ABSTRACT

87/00/00

This paper discusses the need for close integration of environmental and socio-economic assessment efforts with some of the benefits and difficulties of achieving this information.

KEYWORDS
LOCATION
REFERENCE

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:

AUTHOR
TYPE
ORGANIZATION
TITLE

Ehlers, P.; Pelzer, N. (Ed.).
assoc

PUBLISH

INTERNATIONAL AND NATIONAL REGULATIONS FOR THE PROTECTION OF THE NORTH AND BALTIC SEAS AGAINST RADIOACTIVE EMISSIONS
Peaceful uses of Nuclear Energy and State Frontiers in Europe. Proceedings. Baden-Baden, (FRG). 1987. 394 p
206-226.

DATE
ABSTRACT

87/00/00

Radioactive substances have only a subordinate importance concerning harmful substances in North and Baltic Sea aspects, international, are examined.

KEYWORDS

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: regulations, international.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

McBrien, S.; Jones, L.
govt

MITRE Corp. VA (USA).

NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS: SOCIOECONOMIC IMPACTS OF CONSTRUCTING A HIGH-LEVEL WASTE REPOSITORY AT YUCCA MOUNTAIN.

PUBLISH
DATE
ABSTRACT

Sandia National Labs Report 84-7201. Dec. 1984. 205 p
84/12/00

Socioeconomic impacts to Nye and Clark counties associated with construction and operation of a high-level radioactive repository at Yucca Mountain are estimated.

KEYWORDS
LOCATION

SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:

REFERENCE

AUTHOR	Willis, Y.A.; Morris, W.R.
TYPE	priv
ORGANIZATION	Westinghouse Electric Corp., PA (USA).
TITLE	NUCLEAR WASTE INFORMATION MADE ACCESSIBLE: A CASE ST
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 137-142.
DATE	87/00/00
ABSTRACT	Public acceptance and cooperation for nuclear energy Westinghouse has responded to this with the establis Nuclear Waste Management Outreach Program making nuc information easily accessible.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: education, wa management.
LOCATION	
REFERENCE	

AUTHOR	Brody, Julie
TYPE	govt
ORGANIZATION	Nuclear Waste Studies Program, Texas Department of A (USA).
TITLE	PANHANDLE RESIDENTS' VIEWS OF HIGH-LEVEL NUCLEAR WAS
PUBLISH	Office of Natural Resources and Office of Research a Planning, Texas Department of Agriculture, Austin, M 108pp.
DATE	85/05/00
ABSTRACT	Residents of four Texas counties were surveyed regar attitudes about potential socio-economic effects of

KEYWORDS	waste repository. The majority strongly oppose cons a facility, with health and environmental effects th important factors. There are also strong concerns ab on social and economic life of the area. A farm sur conducted shows wide ranging potential effects on ag especially marketability of agricultural produce.
LOCATION	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: public partic
REFERENCE	Texas Department of Agriculture, Box 12847, Austin, anne

AUTHOR	
TYPE	govt
ORGANIZATION	Oak Ridge Associated Universities, Inc. TN (USA).
TITLE	RADIOACTIVE WASTE MANAGEMENT FELLOWSHIP PROGRAM: SUM PROGRAM ACTIVITIES FOR CALENDAR YEAR 1986.
PUBLISH	1987. 44 p.
DATE	87/00/00
ABSTRACT	This document describes a graduate fellowship progra guide future scientists and engineers toward a caree high-level radioactive waste management.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: social impact
LOCATION	
REFERENCE	

AUTHOR	
TYPE	media
ORGANIZATION	
TITLE	ROLE OF OUTSIDE VENDORS EXPANDS IN TWO NUCLEAR-SERVI
PUBLISH	Power. December 1987. V. 131(12). p. 31-33.
DATE	87/12/00
ABSTRACT	

KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	Citizen Alert. (USA).
TITLE	SENATE BILL OFFERS NUKE WASTE BRIBE.
PUBLISH	Citizen Alert Newsletter, Reno, April, 1987, 1p.
DATE	87/04/00
ABSTRACT	U.S. Senators recommend annual payments of \$100 million to the state which accepts a nuclear waste repository within its borders, in exchange for expeditious site characterization, waiver of rights to court actions against DOE, and provisions of National Environmental Protection Act. incentives point to Nevada as a likely site because of its relatively poor economic situation.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: policy and administration
LOCATION	Citizen Alert, Box 5391, Reno, Nevada 89513.
REFERENCE	anne

AUTHOR	Kasperson, R.E (chairman).
TYPE	assoc
ORGANIZATION	Panel on Social and Economic Aspects of Radioactive Waste Management, Washington. (USA).
TITLE	SOCIAL AND ECONOMIC ASPECTS OF RADIOACTIVE WASTE DISPOSAL: CONSIDERATIONS FOR INSTITUTIONAL MANAGEMENT.
PUBLISH	National Academy Press, 1984.
DATE	84/00/00
ABSTRACT	
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	

AUTHOR	Forsythe, R.
TYPE	assoc
ORGANIZATION	Mississippi Energy & Transportation Board. MS (USA).
TITLE	SOCIOECONOMIC ISSUES OF HIGH-LEVEL WASTE REPOSITORY SITES: POLICIES AND PROGRAMS, HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 215-220.
DATE	84/03/00
ABSTRACT	Responses to several papers concerning the socioeconomic issues associated with high-level radioactive waste disposal are compiled. The importance of developing a viable public interaction process in the construction and operation of waste repositories is underscored.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	

AUTHOR	Moore, R.C. (Wyoming Industrial Siting Administration)
TYPE	Post, R.G. (ed.)
ORGANIZATION	
TITLE	STRATEGIES FOR SUCCESSFUL MITIGATION OF SOCIO-ECONOMIC IMPACTS OF NUCLEAR WASTE MANAGEMENT '87: Waste Isolation in technical programs, and public education. Tucson, AZ
PUBLISH	of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00

ABSTRACT	The successful mitigation of socio-economic impacts careful planning for project inception through proje completion. Project location and the schedule for va construction activities can have significant effect Depending on the proximity of a proposed site to dif communities, impacts can be radically different give housing and transportation plans.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: social impact
LOCATION	
REFERENCE	
AUTHOR	Keith, Gary
TYPE	govt
ORGANIZATION	Nuclear Waste Studies Program, Texas Department of A (USA).
TITLE	THE ARROGANCE OF POWER, OR WHEN THE LEAD STARTS TO F IMPACTS AND CONSEQUENCES OF NUCLEAR WASTE REPOSITORY
PUBLISH	T.D.A. Austin, May, 1987, 23pp.
DATE	87/05/00
ABSTRACT	Real and perceived risks to natural resources (land have the effect of "quarantining" the resources of a natural resource issues are intimately bound up with economic issues. The "representative democracy" arg public participation in decision-making is simply not for the nuclear waste disposal issue.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS: public partic decision making.
LOCATION	T.D.A. P.O.Box 12847, Austin, Texas 78711
REFERENCE	NFW 2.2-30-2
AUTHOR	
TYPE	govt/assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	THE RADIOLOGICAL ACCIDENT IN GOIANIA.
PUBLISH	Report STI/PUB/815, IAEA, Vienna.
DATE	88/00/00
ABSTRACT	
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Texas Department of Agriculture. (USA).
TITLE	THE TEXAS DEPARTMENT OF AGRICULTURE AND THE ISSUE OF HIGH-LEVEL NUCLEAR WASTE DUMP.
PUBLISH	T.D.A., Austin,
DATE	
ABSTRACT	An outline of the involvement of the Texas Departmen Agriculture in the nuclear waste disposal issue sinc Lists TDA's criticisms of DOE's Draft Environmental of the Texas sites, which would be generally applica waste site assessment program.
KEYWORDS	SOCIO-ECONOMIC AND ECOLOGICAL IMPACTS:
LOCATION	Texas Department of Agriculture, P.O.Box 12847, Aust 78711
REFERENCE	NFW 2.2-30-5

AUTHOR	Brody, Julie; Fleischmann, Judy
TYPE	govt
ORGANIZATION	Nuclear Waste Studies Program, Texas Department of A (USA).
TITLE	EFFECTS OF A HIGH-LEVEL NUCLEAR WASTE REPOSITORY ON COMMUNITIES: A SURVEY OF PANHANDLE RESIDENTS.
PUBLISH	TDA, Austin, February, 1987
DATE	87/02/00
ABSTRACT	Third in a series of surveys of residents in the area a potential high-level waste repository site in Texas that those opposed to an eventual repository are also site characterization, believing that characterization to the door to an eventual repository. Most people expect negative social and economic impacts, negative environmental impacts, there was great uncertainty about on employment. Urban and rural residents expressed kinds of concerns.
KEYWORDS	SOCIAL IMPACTS:
LOCATION	TDA, P.O.Box 12847, Austin, Texas 78711
REFERENCE	NFW 2.2-31-4

AUTHOR	Petterson, J.S.
TYPE	priv/govt
ORGANIZATION	Impact Assessment, Inc. CA (USA).; Nuclear Waste Pro NV (USA).
TITLE	GOINIA INCIDENT CASE STUDY.
PUBLISH	June 1988. 42 p.
DATE	88/06/00
ABSTRACT	This report necessarily begins with a brief summary describing the Goiania, Brazil, incident; followed by description of the objectives of this follow-up study description of the specific plan of work that was undertaken and the results of the study.
KEYWORDS	SOCIAL IMPACTS:
LOCATION	
REFERENCE	NFW 2.2-31-2

AUTHOR	Robbins, Walter.
TYPE	media
ORGANIZATION	
TITLE	HEWERS OF WOOD, STORERS OF POISON: IS U.S. NUCLEAR W FOR CANADA?
PUBLISH	This Magazine (October 1987) 21(5):4-5.
DATE	87/10/00
ABSTRACT	
KEYWORDS	SOCIAL IMPACTS:
LOCATION	
REFERENCE	

AUTHOR	Walker, D.E.Jr. (Dept. of Anthropology, Univ. of Colo Boulder, CO) Post, R.G. (ed.).
--------	--

TYPE	acad
ORGANIZATION	
TITLE	NATIVE AMERICANS AND CULTURAL IMPACT ANALYSIS: THE P NUCLEAR WASTE REPOSITORY AT HANFORD.

PUBLISH	P. 123-124. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Beneath a surface patterning of legal, political, ec other formal structures, native american reservation tribes posses many culturally distinctive values and life. Their primary objective is survival, and socio cultural impact assessment theories and methods must this objective.
KEYWORDS	SOCIAL IMPACTS: native.
LOCATION	
REFERENCE	
AUTHOR	Cummings, Ronald G. (University of New Mexico).
TYPE	acad
ORGANIZATION	Nuclear Waste Project Office. State of Nevada Agency Projects. (USA).
TITLE	NEW MEXICO WASTE ISOLATION PILOT PROJECT (WIPP): AN OVERVIEW.
PUBLISH	NWPO-SE-013-88, Carson City, June 1988, 46pp.
DATE	88/06/00
ABSTRACT	Reviews technical, transportation and general issues relating to public confidence in DOE) which have ari the siting and construction process for WIPP (the fi repository for transuranic military wastes). Some o issues have resulted in conflicts and may be used as lessons for future waste disposal scenarios, as well suggesting possible mitigation methods.
KEYWORDS	SOCIAL IMPACTS: geologic disposal, transport.
LOCATION	Capitol Complex, Carson City, Nevada 89710
REFERENCE	NFW 2.2-31-1
AUTHOR	Foster, D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	NUCLEAR FUEL WASTE MANAGEMENT: A PRELIMINARY EVALUAT SOCIAL ISSUES.
PUBLISH	Technical Report TR-332. 20 p.
DATE	85/00/00
ABSTRACT	This report identifies and explores a number of soci that arise in connection with nuclear fuel waste dis Canada.
KEYWORDS	SOCIAL IMPACTS: waste management.
LOCATION	
REFERENCE	NFW 2.2-31-3
AUTHOR	Strassburg, W.
TYPE	govt
ORGANIZATION	Deutsche Gesellschaft fuer Wiederaufarbeitung von Kernbrennstoffen M.B.H. (FRG).
TITLE	NUCLEAR WASTE DISPOSAL. STATE OF THE DEBATE IN THE F REPUBLIC OF GERMANY.
PUBLISH	Energiewirtsch. Tagesfragen. May 1987. V. 37(5) p. 3
DATE	87/05/00
ABSTRACT	Technical problems are, and have been, hardly an iss debate about nuclear waste disposal. The predominati increasingly important issue are general questions o regarding the peaceful use of nuclear energy in the
KEYWORDS	SOCIAL IMPACTS:
LOCATION	

REFERENCE

AUTHOR Blowers, A.; Lowery, D.
 TYPE acad
 ORGANIZATION The Open University. (UK).
 TITLE OUT OF SIGHT, OUT OF MIND: THE POLITICS OF NUCLEAR WASTE IN THE UNITED KINGDOM.
 PUBLISH Nuclear Power in Crisis: Politics and Planning for the State. 1987. p. 129-163.
 DATE 87/00/00
 ABSTRACT This paper examines the proposition that waste disposal in the UK is a political rather than a 'rational' or 'scientific' process.
 KEYWORDS SOCIAL IMPACTS: waste management.
 LOCATION
 REFERENCE

AUTHOR Robbins, Walter.
 TYPE media
 ORGANIZATION
 TITLE PEOPLE AND NUCLEAR WASTE (IN MANITOBA).
 PUBLISH NeWest Review (1988) 13(10):4-5.
 DATE 88/00/00
 ABSTRACT
 KEYWORDS SOCIAL IMPACTS: public participation.
 LOCATION
 REFERENCE

AUTHOR
 TYPE acad
 ORGANIZATION
 TITLE TECHNOCRACY AND TRUST: NUCLEAR WASTE CONTROVERSY.
 PUBLISH Journal of Professional Activities-ASCE. January 1988. p. 27-40.
 DATE 88/01/00
 ABSTRACT
 KEYWORDS SOCIAL IMPACTS: public participation.
 LOCATION
 REFERENCE

AUTHOR Fleishman, J.; Brody, J.; Galavotti, C. (Texas Dept. of Agriculture, Austin, TX)
 TYPE Post, R.G.(ed.)
 ORGANIZATION govt
 TITLE THE IMPORTANCE OF COUNTING COWS: SOCIAL AND ECONOMIC HIGH-LEVEL NUCLEAR WASTE REPOSITORY IN TEXAS.
 PUBLISH P. 95-100. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
 DATE 87/00/00
 ABSTRACT Impacts assessments that rely on existing records and extrapolation from broad geographic areas provide information about social and economic conditions impacting a high-level nuclear waste repository.
 KEYWORDS SOCIAL IMPACTS: economics, siting.
 LOCATION
 REFERENCE

AUTHOR Curd, P.J.; Strange, R.C.
 TYPE priv

ORGANIZATION	Nuclear Industry Radioactive Waste Executive, (UK).
TITLE	THE PUBLIC NEEDS TO KNOW.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 45-50.
DATE	87/00/00
ABSTRACT	The conflict between a general national interest and local concern presents a formidable and perhaps inso public relations problem.
KEYWORDS	SOCIAL IMPACTS: public participation.
LOCATION	
REFERENCE	
AUTHOR	Curd, P.; Monckton, N. (Nuclear Industry Radioactive Executive, Harwell, UK)
TYPE	
ORGANIZATION	
TITLE	THE REAL PROBLEM: PUBLIC ACCEPTIBILITY.
PUBLISH	Nucl. Eng. March-April 1988. V.29(2) P. 58-63.
DATE	88/03-04/00
ABSTRACT	The paper concerns the problem of public acceptibili radioactive waste disposal in the United Kingdom.
KEYWORDS	SOCIAL IMPACTS: public participation.
LOCATION	
REFERENCE	
AUTHOR	Colglazier, E.W.; Dungan, D.L.; Reaven, S.J.
TYPE	acad
ORGANIZATION	The University of Tennessee. TN (USA).
TITLE	VALUE ISSUES AND STAKEHOLDERS' VIEWS IN RADIOACTIVE
PUBLISH	MANAGEMENT. Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 185-196.
DATE	87/00/00
ABSTRACT	The authors review a study in progress that is exami played by ethical and value issues in high-level and radioactive waste management. For each policy issue to separate its 'value concerns' into three categori procedural distributional, and evidential asects.
KEYWORDS	SOCIAL IMPACTS: ethics.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	UK NIREX LTD
TITLE	COMMUNITY BENEFIT PROGRAMME-GENERAL PRINCIPLES.
PUBLISH	Pieda, Planning, Economic and Development Consultant
DATE	88/06/00
ABSTRACT	A study which develops a proactive approach to bring benefits to a British community in the vicinity of a facility.
KEYWORDS	SOCIAL IMPACTS: legislation
LOCATION	
REFERENCE	NFW 2.2-31-5

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Lean, Geoffrey.
media
4 BILLION (POUNDS) SHOCK OF N-WASTE DISPOSAL.
Observer (20 November 1988):1.
88/11/20

ECONOMICS:

AUTHOR
TYPE
ORGANIZATION
TITLE

Ostmeyer, R.M.; Skinner, D.J.
govt
Nuclear Regulatory Commission, Washington, DC (USA).
A PRELIMINARY EVALUATION OF THE ECONOMIC RISK FOR CIVILIAN
NUCLEAR MATERIAL LICENSEE CONTAMINATION INCIDENTS.

PUBLISH
DATE
ABSTRACT

Mar 1987. 95 p.
87/03/00
This report documents an analysis of the economic risk of
nuclear material licensee contamination incidents.
ECONOMICS:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

govt
US DOE Office of Civilian Radioactive Waste Management,
Washington, DC (USA).

TITLE

ANALYSIS OF THE TOTAL SYSTEM LIFE CYCLE COST FOR THE
RADIOACTIVE WASTE MANAGEMENT PROGRAM: VOLUME 2, SUMMARY
INFORMATION.

PUBLISH
DATE
ABSTRACT

June 1987. 147 p.
87/06/00
This report provides cost estimates for the fifth year of
the adequacy of the fee and is consistent with the program
strategy and plans.

KEYWORDS
LOCATION
REFERENCE

ECONOMICS:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Rowe, M.D.; Lee, J.C.; Grimshaw, C.A.; Kalb, P.D.
govt
Brookhaven National Lab. NY (USA).

ASSESSING ECONOMIC CONSEQUENCES OF RADIATION ACCIDENTS
1987. 6 p.
87/00/00
This project reviewed the literature on the economic
of accidents to determine the availability of assessments
and data and their applicability to the high-level waste
disposal system before closure.

KEYWORDS
LOCATION

ECONOMICS: risk analysis.

REFERENCE

AUTHOR
TYPE

Beery, J.B.; Homan, F.J.
govt

ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	CHARGING GENERATORS FOR WASTE MANAGEMENT COSTS.
PUBLISH	1987. 8 p.
DATE	87/00/00
ABSTRACT	Charging waste management costs to the pollutor crea incentive to optimize processes so that less waste i and provides a basis for determining the cost effect ECONOMICS:
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Gruer, E.R.; Fowler, M.E.; Rocha, G.A.
TYPE	priv/govt
ORGANIZATION	Sandia National Labs. NM (USA).; Parsons, Brindkerho Douglas, Inc., CA (USA).
TITLE	COST ESTIMATE OF THE YUCCA MOUNTAIN REPOSITORY BASED CHARACTERIZATION PLAN CONCEPTUAL DESIGN: NNWSI.
PUBLISH	June 1987. 132 p.
DATE	87/06/00
ABSTRACT	This report of the life-cycle costs of a mined repos is based on the site characterization conceptual des contains estimates of two methods of waste emplaceme and horizontal. The cost and staffing detail provide estimate is commensurate with the detail in the conc design.
KEYWORDS	ECONOMICS: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	DISPOSAL OF SPENT NUCLEAR FUEL AND HIGH-LEVEL WASTE: TECHNICAL/ECONOMIC ANALYSIS.
PUBLISH	1987. 269 p.
DATE	87/00/00
ABSTRACT	An economic model for the back end of the nuclear fu developed for a once-through cycle, a standard repro cycle, and a reprocessing cycle with fractionation o ECONOMICS: retrieval, reprocessing.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	DRAFT IAEA CO-ORDINATED RESEARCH PROGRAMME ON "COMPA EFFECTIVENESS OF RISK REDUCTION AMONG DIFFERENT ENER
PUBLISH	
DATE	Second Research Co-ordination Meeting, April 21-25, 86/04/00
ABSTRACT	
KEYWORDS	ECONOMICS: international.
LOCATION	
REFERENCE	
AUTHOR	Freeman, H.D.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	ECONOMIC ANALYSIS OF ENGINEERED SORBEN BARRIER TECHN
PUBLISH	July 1987. 8 p.
DATE	87/07/00

ABSTRACT	This paper evaluates the incremental cost of placing engineered sorbent barrier beneath a shallow land burial in a humid climate. The cost estimates are also applicable to alternative uses of sorbent barrier technology such as barriers around below-grade vaults.
KEYWORDS	ECONOMICS: engineering, disposal and storage alternatives
LOCATION	
REFERENCE	
AUTHOR	McKee, R.W.
TYPE	govt
ORGANIZATION	Battelle Pacific Northwest Lab. WA (USA).
TITLE	ECONOMIC ANALYSIS OF WASTE MANAGEMENT SYSTEM ALTERNATIVES FOR REPROCESSING WASTES (WASTE POLICIES AND PROGRAMS, HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA).
DATE	1984. V. 1, p. 383-394.
ABSTRACT	84/03/00 The costs associated with a range of alternatives for reprocessing waste management requiring geologic repository disposal are analyzed. Four integrated treatment facility options for transuranic wastes are compared: no treatment; compaction; incineration; and hulls melting.
KEYWORDS	ECONOMICS: volume reduction, other alternatives.
LOCATION	
REFERENCE	
AUTHOR	Brody, Julie; Galavotti, Christine
TYPE	govt
ORGANIZATION	Nuclear Waste Studies Program, Texas Department of Agriculture (USA).
TITLE	ECONOMIC EFFECTS OF A HIGH-LEVEL NUCLEAR WASTE REPOSITORY
PUBLISH	Texas Department of Agriculture, Austin, December, 1985
DATE	85/12/00
ABSTRACT	Businesses in three counties in Texas were surveyed to determine if a repository would affect their business and the overall economy of the area. Results indicate an extremely high level of concern about effects on business and economics. Most businesses reported a decline in revenues, many said they would close up or move out of the area in the case of repository siting. This study emphasizes the need for detailed baseline studies of economic activities in the proposed repository area.
KEYWORDS	ECONOMICS: social impacts.
LOCATION	T.D.A. Box 12847, Austin, Texas 78711
REFERENCE	anne
AUTHOR	Kunreuther, Howard (Department of Decision Sciences, University of Pennsylvania); Slovic, Paul (Decision Research, Eugene, OR)
TYPE	acad/priv
ORGANIZATION	
TITLE	FORECASTING THE ADVERSE ECONOMIC CONSEQUENCES OF A NUCLEAR WASTE REPOSITORY IN NEVADA.
PUBLISH	Paper presented at the 1989 AAAS meeting, San Francisco, CA
DATE	89/00/00
ABSTRACT	Adverse impacts may come about through perceptions of risk, socially-amplified reactions to various incidents, and stigmatization. Studies undertaken to test this show that an increase in "nuclear imagery" will produce adverse impacts on tourism and other economically-important activities. This empirically-based knowledge should be factored into decision making.

KEYWORDS	decisions regarding siting, constructing and operati
LOCATION	facility, transportation and compensation.
REFERENCE	ECONOMICS: socio-economic and ecological impacts, ri Nuclear Waste Project Office, State of Nevada Agency Projects, Capitol Complex, Carson City, Nevada, 8971 NFW 2.2-32-1
AUTHOR	Slovic, P. (Decision Rsearch, Eugene, OR)
TYPE	Post, R.G. (ed.)
ORGANIZATION	
TITLE	FORECASTING THE ADVERSE EFFECTS OF A NUCLEAR WASTE R
PUBLISH	P. 91-94. Waste Management '87: Waste Isolation in t Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	What is the potential for a high-level nuclear waste to have adverse economic effects on the state or reg it is located? There are theoretical reasons to expe risks to be substantial and there are studies underw these theories.
KEYWORDS	ECONOMICS: risk analysis.
LOCATION	
REFERENCE	
AUTHOR	Garrett, James; Large, John
TYPE	priv
ORGANIZATION	Scottish Campaign to Resist the Nuclear Menace (SCRA
TITLE	MAGNOX - GOING, GOING....
PUBLISH	SCRAM Journal 67, Sept/Oct.1988, 4pp.
DATE	88/10/00
ABSTRACT	Examines the cost and waste issues arising from the decommissioning the first generation of Magnox nucle in Britain.
KEYWORDS	ECONOMICS: waste management.
LOCATION	
REFERENCE	anne
AUTHOR	Scanlan, Larry.
TYPE	media
ORGANIZATION	
TITLE	NUKES FOR A PRICE (NORTHERN ONTARIO TOWNS OFFER TO S PERMANENT DUMP FOR LOW-LEVEL RADIOACTIVE WASTE)
PUBLISH	Equinox (May-June 1988) 7(3):112, 117.
DATE	88/05/00
ABSTRACT	
KEYWORDS	ECONOMICS:
LOCATION	
REFERENCE	
AUTHOR	govt
TYPE	The Department of Agriculture. Texas (USA).
ORGANIZATION	PANHANDLE AGRICULTURE, THE U.S. DEPARTMENT OF ENERGY
TITLE	NUCLEAR WASTE DUMP.
PUBLISH	October 1986. 30 p.
DATE	86/10/00
ABSTRACT	This paper discusses the effect the siting of a nucl dump in Texas would have on the agriculture industry
KEYWORDS	ECONOMICS:
LOCATION	

REFERENCE	NFW 2.2-32-2
AUTHOR	Peelle, E. (Oak Ridge National Lab., Oak Ridge, TN)
TYPE	Post, R.G. (ed.)
ORGANIZATION	govt
TITLE	THE MRS TASK FORCE: ECONOMIC AND NON-ECONOMIC INCENT LOCAL PUBLIC ACCEPTANCE OF A PROPOSED NUCLEAR WASTE AND STORAGE FACILITY.
PUBLISH	P. 117-122. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	A citizen task force evaluated the Department of Ene proposal to site a monitored retrievable storage fac Tennessee in terms of environmental, transportation, socio-economic impacts.
KEYWORDS	ECONOMICS: ecological impacts, socio-economic and ec impacts.
LOCATION	
REFERENCE	

AUTHOR	Standing Committee On Energy, Mines and Resources
TYPE	govt
ORGANIZATION	Energy, Mines and Resources
TITLE	NUCLEAR ENERGY UNMASKING THE MYSTERY- TENTH REPORT C STANDING COMMITTEE ON ENERGY, MINES AND RESOURCES.
PUBLISH	Standing Committee On Energy, Mines and Resources
DATE	88/08/00
ABSTRACT	An examination of the economics of Canadian nuclear matters pertaining thereto. The committee gives recommendations to the House of Commons.
KEYWORDS	ECONOMICS:
LOCATION	
REFERENCE	NFW 2.2-32-3

AUTHOR	Watabe, T.; Sugawara, K.
TYPE	govt
ORGANIZATION	National Institute of Radiological Sciences. (Japan)
TITLE	137CS IN URINE OF TOURISTS WHO VISITED KIEV LATE IN ESTIMATION OF THE INTAKE OF 137CS AND 239PU DUE TO T REACTOR ACCIDENT.
PUBLISH	J.Radiat. Res. June 1987. V. 28(2) p. 141-149.
DATE	87/06/00
ABSTRACT	Gamma-ray spectrometry analysis was made of urine sa tourists who had visited Kiev late in April, 1986. S samples had significant amounts of 137CS ranging in concentrations. The results suggested the presence o the air in Kiev and the possibility of the inhalatio daughter nuclides by tourists.
KEYWORDS	HEALTH: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Lett, J.T.; Ehmann, U.K.; Cox, A.B.
TYPE	
ORGANIZATION	
TITLE	ADVANCES IN RADIATION BIOLOGY.
PUBLISH	Orlando, FL. Academic Press Inc. 1987. 394 p.
DATE	87/00/00
ABSTRACT	This volume covers a number of areas in which new id research are playing a vital role, including cellula sensitivity, radioactive waste disposal, and space r biology.
KEYWORDS	HEALTH:
LOCATION	
REFERENCE	
AUTHOR	Johnson, J.R.; Brown, R.M.; Myers, D.K.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	AN OVERVIEW OF RESEARCH AT CRNL ON THE ENVIRONMENTAL TOXICITY, METABOLISM AND DOSIMETRY OF TRITIUM.
PUBLISH	5 p. (1986). Reprinted from Radiation Protection Dos 16(1-2):17-21.
DATE	86/00/00
ABSTRACT	
KEYWORDS	HEALTH:
LOCATION	
REFERENCE	
AUTHOR	Reed, P.; Emery, J.
TYPE	assoc
ORGANIZATION	Cumbrians Opposed to a Radioactive Environment. (COR
TITLE	BLACK REPORT UPDATE.
PUBLISH	CORE, Cumbria, U.K., December, 1988
DATE	88/12/00
ABSTRACT	A local update to the Black Report which was commiss

examine the incidence of cancers and leukaemias in u olds in the area of the Windscale (Sellafield) repro plant. Calls for a review of the the Black Report ba additional data gathered by the citizens group. Ill

KEYWORDS	important data is often overlooked in official health
LOCATION	HEALTH:
REFERENCE	CORE, 98 Church St. Barrow-in-Furness, Cumbria, LA14 4anne
AUTHOR	Thompson, J.J.
TYPE	assoc
ORGANIZATION	Cumbrians Opposed to a Radioactive Environment (CORE)
TITLE	CORE'S CONTRIBUTION - SEASCALE CHILD CANCERS AND THE REPORT.
PUBLISH	CORE, March, 1986,
DATE	86/03/00
ABSTRACT	Critiques reports of the British National Radiological Board commissioned by the Black Committee investigating childhood leukaemias and cancers at Windscale and the to radioactive contamination. The reports are shown methodologically in serious error, especially with regard radiation doses to lymph tissue.
KEYWORDS	HEALTH:
LOCATION	CORE, 83 Church St. Barrow-in-Furness, Cumbria, LA14 4anne
REFERENCE	
AUTHOR	Urquhart, John
TYPE	priv
ORGANIZATION	
TITLE	DEADLY CLUSTERS.
PUBLISH	The Guardian, March 20, 1987, 1p.
DATE	87/03/20
ABSTRACT	Raises important questions about the statistical trend evidence in the leukaemia cluster Inquiry in Britain. A stringent analysis reveals an association between increased cancer levels and nuclear facilities.
KEYWORDS	HEALTH: safety analysis.
LOCATION	
REFERENCE	anne
AUTHOR	
TYPE	assoc
ORGANIZATION	Working for Independence from Nuclear Danger (WIND)
TITLE	DR. ERNEST STERNGLASS - THE HEALTH EFFECTS OF RADIATION
PUBLISH	Waupaca, Wisc. October, 1986
DATE	86/10/21
ABSTRACT	A videotape of a presentation by Dr. Ernest Sternglass on health effects of radiation.
KEYWORDS	HEALTH:
LOCATION	WIND, P.O.Box 441, Waupaca, Wisc. 54981
REFERENCE	anne
AUTHOR	
TYPE	assoc
ORGANIZATION	Working for Independence from Nuclear Danger (WIND)
TITLE	DR. ROSALIE BERTELL - HEALTH EFFECTS OF RADIATION.
PUBLISH	Waupaca, October 1987
DATE	87/10/21
ABSTRACT	A videotape of a public presentation by Dr. Rosalie Bertell.
KEYWORDS	HEALTH:
LOCATION	WIND, P.O.Box 441, Waupaca, WI 54981
REFERENCE	anne
AUTHOR	Oakes, T.W.; Kimbrough, C.W.; Pritz, P.M.; Goodpastor, Huang, S.F.; Gist, C.S.; Weber, C.W.; Aebischer, E.D.

TYPE	F.M. Jr.
ORGANIZATION	priv
TITLE	Martin Marietta Energy Systems, Inc., Oak Ridge, TN ENVIRONMENTAL SURVEILLANCE OF THE US DEPARTMENT OF E RIDGE RESERVATION AND SURROUNDING ENVIRONS DURING 19 1, SUMMARY AND CONCLUSIONS.
PUBLISH	Apr 1987. 289 p.
DATE	87/04/00
ABSTRACT	Measurable evidence provides a degree of confidence that the aggressive, long-term program of corrective waste management improvements now under way will be in restoring and enhancing environmental quality in and in reducing the potential for any deleterious im human health from current or past Oak Ridge Operatio HEALTH: ecological impacts.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Edwards, Gordon
TYPE	assoc
ORGANIZATION	Canadian Coalition for Nuclear Responsibility.
TITLE	ESTIMATING LUNG CANCERS.
PUBLISH	CCNR, Montreal, (updated) August, 1985, 103pp.
DATE	85/08/00
ABSTRACT	Mainly deals with estimating lung cancers from expos gas, but contains important summaries of the various in estimating risk from alpha radiation. Critical of regulatory guidelines for alpha radiation. Contains from B.C. Medical Association report on the health d uranium mining.
KEYWORDS	HEALTH:
LOCATION	CCNR, 53 Dufferin Rd. Montreal, Quebec, H2X 3X8
REFERENCE	anne
AUTHOR	Bertell, Rosalie
TYPE	assoc
ORGANIZATION	International Institute of Concern for Public Health
TITLE	HUMAN HEALTH MONITORING RELATIVE TO A NUCLEAR ACCIDE
PUBLISH	IICPH, Toronto, 1984, 4pp.
DATE	84/00/00
ABSTRACT	Outlines a preliminary proposal for a baseline healt carried out in the vicinity of a proposed nuclear fa designed to identify health effects arising from an the proportion of health effects attributable to the and an acceptable level of compensation for the fami affected. Costs of baseline studies would be borne operators as an assurance of responsibility in the c accident.
KEYWORDS	HEALTH: analytical techniques.
LOCATION	IICPH, 830 Bathurst St. Toronto, Ont. M5R 3G1
REFERENCE	anne
AUTHOR	Kocher, D.C.; Trabalka, J.R.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	ISSUES IN PRIORIZATION FOR REMEDIAL ACTION AT ORNL.
PUBLISH	1987. 6 p.
DATE	87/00/00
ABSTRACT	The effective closure of existing sites of contamina radioactive material to protect public health is pre this report.

KEYWORDS
LOCATION
REFERENCE

HEALTH:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Urquhart, John
assoc
Friends of the Earth. (U.K).
LEUKAEMIA AND NUCLEAR POWER IN BRITAIN - THE EVIDENCE
FOE Trust, E-6, London, November, 1986, 15pp.
86/11/00
Report of an FOE commissioned study into the incidence of leukaemia clusters around nuclear installations.

KEYWORDS
LOCATION
REFERENCE

HEALTH:
FOE, 26-28 Underwood St. London, N1 7JQ, U.K.
anne

AUTHOR
TYPE
ORGANIZATION
TITLE

govt
General Accounting Office, Washington, DC.
NUCLEAR HEALTH AND SAFETY, DOE'S PROGRESS IN IMPLEMENTING
1985 INITIATIVES.

PUBLISH
DATE
ABSTRACT

1987. 12 p.
87/00/00
The DOE announced several initiatives to strengthen environmental, safety, and health programs with programs implementing all but one of the initiatives.
HEALTH: safety analysis, ecological impacts.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

assoc
Radioactive Waste Campaign. (USA).
ON THE JOB AT NFS - OCCUPATIONAL HAZARDS IN THE REPROCESSING
BUSINESS.
RWC Fact Sheet, New York, 6pp.

PUBLISH
DATE
ABSTRACT

Examines occupational hazards in the reprocessing of nuclear fuel with examples from Nuclear Fuel Service Valley plant in New York State. Frequent equipment failure led to greater exposure levels of employees and the even greater exposure of temporary employees on a widespread basis to do the hazardous work. No health study was undertaken.

KEYWORDS
LOCATION
REFERENCE

HEALTH: reprocessing, occupational exposure.
RWC, 625 Broadway, New York, N.Y. 10012
NFW 2.2-33-2

AUTHOR
TYPE
ORGANIZATION

Baker, D.A.; Peloquin, R.A.
priv/govt
Pacific Northwest Lab. WA (USA); Nuclear Regulatory Commission, Washington, DC (USA).

TITLE

POPULATION DOSE COMMITMENTS DUE TO RADIOACTIVE RELEASES FROM NUCLEAR POWER PLANT SITES IN 1983.

PUBLISH
DATE
ABSTRACT

Apr 1987. 139 p.
87/04/00
Population radiation dose commitments have been estimated from reported radionuclide releases from commercial power plants operating during 1983.

KEYWORDS
LOCATION
REFERENCE

HEALTH:

<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT</p>	<p>Welty, C.G.Jr.; Kennedy, W.E.Jr.; Hawley, K.A. priv Pacific Northwest Lab. WA (USA). POPULATION EXPOSURES FROM US DEPARTMENT OF ENERGY OP 18 August 1987. 15 p. 87/08/18 The DOE annually collects information concerning emi calculates radiation doses to the population within 80-kilometer radius of its operating nuclear install HEALTH: public exposure.</p>
<p>KEYWORDS LOCATION REFERENCE</p>	
<p>AUTHOR TYPE ORGANIZATION TITLE</p>	<p>Rogers, V.C.; Sandquist, G.M.; Sutherland, A.A. (Rog Associates Engineering Corp., Salt Lake City) Post, R.G. (ed.) priv POTENTIAL EXPOSURES AND HEALTH EFFECTS FROM SPENT FU TRANSPORTATION.</p>
<p>PUBLISH DATE ABSTRACT</p>	<p>P. 477-482. Waste Management '87: Waste Isolation in Technical Programs and Public Education. Tucson, AZ. of Arizona Nuclear Engineering Dept. 1987. 87/00/00 The radiation exposures and consequent health effect with normal operations and postulated accidents duri transportation of spent fuel have been analysed and and the results have been summarized in the final en assessments issued by DOE.</p>
<p>KEYWORDS LOCATION REFERENCE</p>	<p>HEALTH: transport.</p>
<p>AUTHOR TYPE ORGANIZATION TITLE</p>	<p>Jackson, J.L. govt Sandia National Lab. NM (USA). PRELIMINARY WORST-CASE ACCIDENT ANAYLSIS TO SUPPORT CONCEPTUAL DESIGN OF A POTENTIAL REPOSITORY IN TUFF POLICIE AND PROGRAMS, HIGH-LEVEL WASTE).</p>
<p>PUBLISH DATE ABSTRACT</p>	<p>Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 561-568. 84/03/00 A preliminary analysis was performed to identify eve could cause radiological release from surface facili site operations and their subsequent effects on huma populations.</p>
<p>KEYWORDS LOCATION REFERENCE</p>	<p>HEALTH:</p>
<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT</p>	<p>Russell-Jones, Robin; Southwood, Richard (eds) Friends of the Earth. (U.K). RADIATION AND HEALTH. Wiley Books, 1987, 292pp. 87/00/00 The biological effects of low-level exposure to ioni radiation. Edited proceedings of an International C the Biological Effects of Ionizing Radiation.</p>
<p>KEYWORDS</p>	<p>HEALTH:</p>

LOCATION REFERENCE	FOE, 26-28 Underwood St. London, N1 7JQ, U.K. anne
AUTHOR	
TYPE	assoc
ORGANIZATION	Cumbrians Opposed to a Radioactive Environment. (COR)
TITLE	RADIATION STUDIES FOR WORKERS.
PUBLISH	6pp.
DATE	
ABSTRACT	A fact sheet on radiation exposure and health effect and the public.
KEYWORDS	HEALTH: occupational exposure.

LOCATION REFERENCE	CORE, 98 Church St. Barrow-in-Furness, Cumbria, LA14 anne
AUTHOR	
TYPE	priv
ORGANIZATION	Consumer's Association of Ireland. Dublin. (Ireland)
TITLE	RADIATION.
PUBLISH	September 1987. 4 p.
DATE	87/09/00
ABSTRACT	Radiation has come to represent one of the major hea to mankind. This report explains what it is and why us.
KEYWORDS	HEALTH: public exposure.

AUTHOR	Ralston, L.; Cohen, N. (ed.)
TYPE	acad
ORGANIZATION	New York Univ., NY, USA. Medical Center.
TITLE	RADIOACTIVITY STUDIES: FINAL REPORT, JUNE 1985- AUGU
PUBLISH	November 1987. 124 p.
DATE	87/11/00
ABSTRACT	We investigated studies of nuptunium metabolism in t primate species to derive dosimetric paramenters nec accurate human radiation risk assessments. The metab neptunium was studied in adult female baboons and ta following intravenous injection and intragastric inc
KEYWORDS	HEALTH: risk analysis.

LOCATION REFERENCE	
AUTHOR	Neill, Robert H.; Channell, James K.; Wofsy, Carla; Moses A. (eds)
TYPE	govt
ORGANIZATION	Environmental Evaluation Group, Health and Environme Department, State of New Mexico. (USA).
TITLE	RADIOLOGICAL HEALTH REVIEW OF THE DRAFT ENVIRONMENTA STATEMENT, WASTE ISOLATION PILOT PLANT.
PUBLISH	EEG-3, Santa Fe, August, 1979, 92pp. plus appendices
DATE	79/08/00
ABSTRACT	Reviews the Environmental Impact Statement for the W a view to possible radiological health consequences from emissions and accidents. Includes a review of geohydrological characteristics of the site as it pe the environmental, health and safety aspects of the repository.
KEYWORDS	HEALTH:
LOCATION REFERENCE	7007 Wyoming Blvd NE, St. F-2, Albuquerque, New Mexi NFW 2.2-33-1

AUTHOR TYPE	Crouch, David acad
ORGANIZATION TITLE	Science Policy Research Unit, University of Sussex, SCIENCE AND TRANS-SCIENCE IN RADIATION RISK ASSESSME CANCER AROUND THE NUCLEAR FUEL REPROCESSING PLANT AT U.K.
PUBLISH	The Science of the Total Environment, 53, Elsevier S Publishers, Amsterdam, 1986,15pp.
DATE	86/09/00
ABSTRACT	Examines the role of quantitative risk assessment in protection. It has become apparent from the Sellafi that environmental mechanisms for distribution of ra are not well understood, the same is true for metabo radionuclides. There is continued uncertainty over magnitude of low-level dose response for radiation c In this light, ICRP models are often oversimplified. that greater openness by the industry when discussin difficulties may reduce public distrust of nuclear t HEALTH: risk analysis, radionuclide migration.
KEYWORDS LOCATION REFERENCE	anne
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Sagan, L. priv SPECIAL ISSUE ON RADIATION HORMESIS. Health Physics, Volume 52, No. 5, May, 1987. 87/05/00 HEALTH:
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Emery, Jean assoc Cumbrians Opposed to a Radioactive Environment. (COR SPEECH FOR INTERNATIONAL FORUM ON RADIATION VICTIMS. 7pp. Gives some historical background from a citizen's pe about accidents and their consequences around the Wi plant, including the reaction of plant management. the high rates of multiple myeloma and other cancers region.
KEYWORDS LOCATION REFERENCE	HEALTH: CORE, 98 Church St. Barrow-in-Furness, Cumbria, LA14 anne
AUTHOR TYPE ORGANIZATION TITLE PUBLISH	Williams, R.G.; Olshansky, S.J. acad Colorado State University. CO (USA). STRESS AND RADIOACTIVE WASTE MANAGEMENT. Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un

DATE	Arizona Nuclear Engineering Dept. 1987. p. 259-264.
ABSTRACT	87/00/00 In the Supreme Court case 'People against nuclear energy Metropolitan Edison' one of the conclusions was that Regulatory Commission did not have to consider psych distress, community cohesiveness, and sense of well- supplement to the environmental impact statement co restart of Three Mile Island. In this paper, the aut summarize the literature on the relationship between environmentally-induced stress and its effects on he present the results of a new survey research project levels of stress were evaluated in west Chicago.
KEYWORDS	HEALTH: policy and administration, public participat
LOCATION	
REFERENCE	
AUTHOR	Singh, N.P.; Wrenn, M.E.
TYPE	acad
ORGANIZATION	Utah Univ. Salt Lake City (USA).
TITLE	UPTAKE OF URANIUM FROM DRINKING WATER.
PUBLISH	September 1987. 14 p.
DATE	87/09/00
ABSTRACT	The gastrointestinal absorption of uranium in man fr water was determined by measuring urinary and fecal 234U and 238U in eight subjects.
KEYWORDS	HEALTH:
LOCATION	
REFERENCE	
AUTHOR	Sagan, L.
TYPE	priv
ORGANIZATION	
TITLE	WHAT IS HORMESIS AND WHY HAVEN'T WE HEARD ABOUT IT F
PUBLISH	Health Physics, Volume 52, No. 5, p. 521, May, 1987.
DATE	87/05/00
ABSTRACT	
KEYWORDS	HEALTH:
LOCATION	
REFERENCE	
AUTHOR	Stinebaugh, R.E.; Frostenson, J.C.
TYPE	priv/govt
ORGANIZATION	Sandia National Lab. NM; Los Alamos Technical Associ (USA).
TITLE	WORKER RADIATION DOSES DURING VERTICAL EMPLACEMENT A OF SPENT FUEL AT THE TUFF REPOSITORY.
PUBLISH	February 1987. 57 p.
DATE	87/02/00
ABSTRACT	One of the principal objectives of the Nevada Nuclea Storage Investigations Project is the development of designs of the equipment and facilities that will be the tuff repository for high-level radioactive waste
KEYWORDS	report has been prepared for use by the repository o the conceptual design of waste handling facilities a for vertical emplacement.
LOCATION	HEALTH: occupational exposure, waste handling and em

Council on Scientific Affairs, American Medical Association.
American Medical Association.
MEDICAL PERSPECTIVE ON NUCLEAR POWER.
Journal of the American Medical Association (Nov. 17
(19): 2724-2729.

89/11/17
A summary of the main report which mainly deals with the physician with regard to nuclear power. The report comments on: the nuclear fuel cycle, nuclear power plant unplanned releases from nuclear reactors, and risks nuclear power.

HEALTH:

NFW 2.2-33-3

[illegible]

PPPP	III	L	OOO	N	N
P P	I	L	O O	N	N
P P	I	L	O O	NN	N
PPPP	I	L	O O	N N	N
P	I	L	O O	N	NN
P	I	L	O O	N	N
P	III	LLLLL	OOO	N	N

AUTHOR	
TYPE	media
ORGANIZATION	
TITLE	200 IRATE CANADIANS SHOW UP TO OPPOSE US NUCLEAR DUM
PUBLISH	Montreal Gazette, April 25, 1985. p. A2.
DATE	85/04/25
ABSTRACT	
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	

AUTHOR	
TYPE	
ORGANIZATION	
TITLE	A PACKAGE OF TESTIMONIES TO VARIOUS US ADMINISTRATION
	GEOLOGICAL DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE.
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	NFW 2.2-34-9

AUTHOR	Timmers, Donovan.
TYPE	assoc
ORGANIZATION	Concerned Citizens of Manitoba, Inc. (Canada).
TITLE	BARRELLING DOWN THE NUCLEAR WASTE HIGHWAY.
PUBLISH	Prairie Network News, Edmonton, Fall, 1986, 3pp.
DATE	86/00/00
ABSTRACT	Reviews two parallel conferences on nuclear waste ma in Winnipeg in 1986, one technical and industry orie nature, the other more broadly-based and activist-or Also describes a mock radioactive waste shipment sta citizens group and its public policy repurcussions.
KEYWORDS	PUBLIC PARTICIPATION: transport.
LOCATION	204 Arnold Ave. Winnipeg, Manitoba, R3L 0W5
REFERENCE	anne

AUTHOR	Fitch, J.
TYPE	acad
ORGANIZATION	Luton College of Higher Education. (UK).
TITLE	CATCH 22 IN ACHIEVING PUBLIC TRUST.
PUBLISH	Planning (Gloucester). 13 Nov. 1987. No. 744 p. 12-1
DATE	87/11/13
ABSTRACT	The strategy of NIREX, the organization responsible disposal of radioactive wastes in the UK, in trying public acceptance of its suggested disposal sites, i The idea that opposition to nuclear power waste disp particular locality is due to public ignorance is sh untrue.
KEYWORDS	PUBLIC PARTICIPATION: geologic disposal.
LOCATION	

REFERENCE

AUTHOR	Shaw, D.H.
TYPE	

ORGANIZATION TITLE	DEPARTMENT OF ENERGY MISSION PLAN FOR THE CIVILIAN R WASTE MANAGEMENT PROGRAM.
PUBLISH DATE	Minneapolis, MN (USA). Univ. of Minnesota. 1988. VP. 88/00/00
ABSTRACT	The document illustrates the development of an agency solving a problem, and the extent to which public in may not influence that approach.
KEYWORDS	PUBLIC PARTICIPATION: siting, policy and administration
LOCATION REFERENCE	
AUTHOR TYPE	Emery, Jean; Thompson, J. assoc
ORGANIZATION TITLE	Cumbrians Opposed to a Radioactive Environment. (COR EVIDENCE TO THE HOUSE OF COMMONS SELECT COMMITTEE ON RADIOACTIVE WASTE.
PUBLISH DATE	CORE, Barrow-in-Furness, 1985, 16pp. 85/00/00
ABSTRACT	Summary of problems associated with radioactive waste Cumbria, with special attention to the reprocessing Sellafield (Windscale) and its effects on the surround environment and economy, the volumes of waste arising of reprocessing. Recommends that spent fuel reprocess halted, and the fuel be stored in dry casks at reactor PUBLIC PARTICIPATION: reprocessing, socio-economic and impacts.
KEYWORDS	
LOCATION REFERENCE	CORE, 98 Church St. Barrow-in-Furness, Cumbria LA14 NFW 2.2-34-1
AUTHOR TYPE	Montenegro, Raul (Fundacion para la Defensa del Ambiente) assoc
ORGANIZATION TITLE	Greenpeace. (Argentina). IN PATAGONIA, WHO WOULD BURY WHO? NO TO THE NUCLEAR
PUBLISH DATE	September, 1988, 3pp 88/09/00
ABSTRACT	Text of pamphlet opposing nuclear waste repositories Argentina. Especially expresses concern about the impact of foreign wastes.
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	FUNAM, Casilla de Correo 83, Correo Central, 5000 C Argentina
REFERENCE	anne
AUTHOR TYPE	govt
ORGANIZATION TITLE	US DOE Office of Civilian Radioactive Waste Management INFORMATION SERVICES DIRECTORY.
PUBLISH DATE	May 1987. 27 p. 87/05/00
ABSTRACT	This directory will facilitate dissemination of information is a reference document that lists the sources of public information available to the States, Indian tribes, public.
KEYWORDS	PUBLIC PARTICIPATION: native.
LOCATION REFERENCE	
AUTHOR TYPE	Ehmke, W.
ORGANIZATION	

TITLE	INTERMEDIATE STEPS. THE MOVEMENT AGAINST NUCLEAR PC
PUBLISH	GORLEBEN AND WACKERSDORF.
DATE	Koeln. Koelner Volksblatt Verl. 1987. 231 p.
ABSTRACT	87/00/00
	In February 1987, it was ten years ago that Prime Mi
	Albrecht designated Gorleben as the site where the r
	waste disposal center was to be erected. This volume
	the protest movement of those ten years in chronolog
	It reflects political and social aspects as well as
	aspects.
KEYWORDS	PUBLIC PARTICIPATION: risk analysis, social impacts
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Energy, Mines and Resources. (Canada).
TITLE	MINUTES OF THE PROCEEDINGS AND EVIDENCE OF THE STAND
	ON ENVIRONMENT AND FORESTRY.
PUBLISH	April 1, 1987. 28 p.
DATE	87/04/01
ABSTRACT	
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	NFW 2.2-34-2
AUTHOR	
TYPE	govt
ORGANIZATION	Energy, Mines and Resources. (Canada).
TITLE	MINUTES OF THE PROCEEDINGS AND EVIDENCE OF THE STAND
	ON ENVIRONMENT AND FORESTRY.
PUBLISH	April 7, 1987. 25 p.
DATE	87/04/07
ABSTRACT	
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	NFW 2.2-34-2
AUTHOR	Gyorgy, A.
TYPE	
ORGANIZATION	priv
TITLE	NO NUKES: EVERYONE'S GUIDE TO NUCLEAR POWER.
PUBLISH	Black Rose Books. 478 p.
DATE	87/00/00
ABSTRACT	International experts look at the energy crisis and
	shaping our society.
KEYWORDS	PUBLIC PARTICIPATION: ethics.
LOCATION	
REFERENCE	
AUTHOR	Wilder, M.; Hall, S.
TYPE	govt
ORGANIZATION	Department of Ecology, State of Washington.
TITLE	OVERCOMING BARRIERS TO PUBLIC UNDERSTANDING OF NUCLE
	MANAGEMENT.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec
	Programs and Public Education. Tucson, AZ, (USA). Un
	Arizona Nuclear Engineering Dept. 1987. p. 181-184.
DATE	87/00/00
ABSTRACT	Communications with the public to promote public und
	of, and participation in, nuclear waste issues is cr

KEYWORDS
LOCATION
REFERENCE

However, such communication with the public is falli
This paper discusses the authors' observations of ho
loss of credibility has affected the high-level nucl
repository siting process and suggests methods to ov
primary barrier.
PUBLIC PARTICIPATION:

AUTHOR
TYPE
ORGANIZATION
TITLE

assoc
Concerned Citizens of Manitoba.
PRESENTATION TO THE HOUSE OF COMMONS STANDING COMMIT
ENVIRONMENT AND FORESTRY.
Feb 3, 1987. 21 p.
87/02/03

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:
NFW 2.2-34-6

AUTHOR
TYPE
ORGANIZATION
TITLE

Lecuyer, G.
assoc
Manitoba Environment and Workplace Safety and Health
PRESENTATION TO THE HOUSE OF COMMONS STANDING COMMIT
ENVIRONMENT AND FORESTRY.
Feb 5, 1987. 23 p.
87/00/00

PUBLISH
DATE
ABSTRACT
KEYWORDS

PUBLIC PARTICIPATION:

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Poch, D.
priv
PRESENTATION TO THE HOUSE OF COMMONS STANDING COMMIT
ENVIRONMENT AND FORESTRY.
Feb 3, 1987. 17 p.
87/02/03

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:
NFW 2.2-34-7

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Easterling, J.B. (Policy and Institutional Planning
Washington, DC)
Post, R.G. (ed.)
govt
PUBLIC CONFIDENCE IN RADIOACTIVE WASTE DISPOSAL.
P. 43-46. Waste Management '87: Waste Isolation in t
Technical Programs, and Public Education. Tucson, AZ
of Arizona Nuclear Engineering Dept. 1987.
87/00/00

DATE
ABSTRACT

Broader citizen involvement and confidence in nuclea
disposal plans and programs is needed if the nation
successful in permanent isolation of such waste. Thi
explores ways to improve public information, educati
participation in order to enhance public confidence.
PUBLIC PARTICIPATION:

KEYWORDS

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Anderson, R.B.

govt

Atomic Energy of Canada Limited.

PUBLIC CONSULTATION AND THE CANADIAN FUEL WASTE MANAGEMENT. CONFERENCE ON RADIOACTIVE WASTE MANAGEMENT.

2nd International Conference on Radioactive Waste Management. Sept. 7-11, 1986. p 240-246.

86/00/00

PUBLIC PARTICIPATION:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Dixon, R.S.; Anderson, R.B.; Greber, M.A.; Hillier,

govt

Atomic Energy of Canada Limited.

PUBLIC CONSULTATION IN THE CANADIAN NUCLEAR FUEL WASTE MANAGEMENT '87: Waste Isolation in the US, Tec

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 155-162.

87/00/00

AECL has developed a public consultation program as component of the Canadian Nuclear Fuel Waste Management.

PUBLIC PARTICIPATION:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Lyons, W; Fitzgerald, M.R.; McCabe, A.

PUBLIC OPINION AND HAZARDOUS WASTE.

Forum Appl. Res. Public Policy. (AUT 1987). V. 2(3)

87/08/00

The level of government involvement in hazardous waste has become the policy issue of the 1980's. The public of waste facilities because of the potential for contamination. A survey of Tennessee households found that the public has most faith in public agencies to manage hazardous waste. PUBLIC PARTICIPATION: disposal and storage alternatives.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

assoc

Cumbrians Opposed to a Radioactive Environment, Green Friends of the Earth, U.K.

QUESTIONS YOU SHOULD ASK NIREX.

Greenpeace.

TITLE
PUBLISH
DATE
ABSTRACT

Question/answer sheet on the topics of public opinion consultation concerning radioactive waste management. Criticizes the Nirex consultation process. Advocate storage in order to minimize population exposure, minimize number of contaminated sites, and transportation accidents. PUBLIC PARTICIPATION: education.

KEYWORDS
LOCATION
REFERENCE

FOE, 26-28 Underwood St. London, N1 7JQ, U.K.
anne

<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT</p>	<p>assoc Fond du Lac Reservation. Cloquet, MN (USA). REPORT ON DRAFT AREA RECOMMENDATION REPORT FOR THE C REPOSITORY PROJECT. 1987. 20 p. 87/00/00 The Fond du Lac tribe is an affected tribe whose pro interests will be impacted by the crystalline reposi as identified in the draft ARR. The NWPA required pa by affected tribes, of which the Fond du Lac band of Superior Chippewa is included.</p>
<p>KEYWORDS LOCATION REFERENCE</p>	<p>PUBLIC PARTICIPATION: native.</p>
<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT</p>	<p>Davis, G.A. (Legal Environmental Assistance Foundati Knoxville, TN) govt Oak Ridge National Lab. TN (USA). ROLE OF THE PUBLIC IN THE OAK RIDGE MODEL. P. 39-43. Oak Ridge Model Conference: Proceedings. 1 87/00/00 The role of the public in relation to the Oak Ridge waste management practices in Oak Ridge, TN are disc Oak Ridge Environmental Advisory Committee is one wa public has been involved and continues to be involve Ridge Model.</p>
<p>KEYWORDS LOCATION REFERENCE</p>	<p>PUBLIC PARTICIPATION:</p>
<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE</p>	<p>Pat Delbridge Associates Incorporated. govt Atomic Energy of Canada Limited. SELECTION OF GROUPS TO PARTICIPATE IN THE CANADIAN N WASTE MANAGEMENT PUBLIC CONSULTATION PROGRAM. Technical Record TR-333. 13 p. 85/00/00 PUBLIC PARTICIPATION:</p>
<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE</p>	<p>Frech, E.R. assoc SOCIAL AND POLITICAL ASPECTS OF NUCLEAR FUEL WASTE M Presentation to the House of Commons Standing Commit Environment and Forestry, Feb. 2, 1987. 4 p. 87/02/02 PUBLIC PARTICIPATION: social impacts.</p>
<p>AUTHOR TYPE ORGANIZATION TITLE</p>	<p>Edwards, G. assoc Canadian Coalition for Nuclear Responsibility. SUBMISSION TO THE HOUSE OF COMMONS STANDING COMMITTEE ENVIRONMENT AND FORESTRY.</p>

PUBLISH
DATE
ABSTRACT

February 3, 1987. 58 p.
87/00/00

KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:

NFW 2.2-34-8

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Peelle, Elizabeth (Oak Ridge National Lab)
priv

TESTIMONY BEFORE THE MRS COMMISSION.

Atlanta, February, 1989, 11pp.

89/02/16

Reviews the experience of the Clinch River MRS Task examination of the MRS issue in Tennessee. Institutional concerns are amongst the most serious and most poorly handled by the current political process. Local government groups such as this one hold some promise in overcoming institutional problems and thus contribute to socially acceptable and durable decisions.

KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:

130 Oklahoma Ave. Oak Ridge, Tennessee, 37830
anne

AUTHOR
TYPE
ORGANIZATION
TITLE

Poch, David
assoc

Energy Probe, et.al.

TESTIMONY TO HOUSE OF COMMONS STANDING COMMITTEE ON
AND FORESTRY, REGARDING HIGH-LEVEL NUCLEAR WASTE IN
Canadian Government Publishing Services, Ottawa, Feb

PUBLISH
DATE
ABSTRACT

87/02/00

Discusses some of the regulatory problems with AECL, its role in deciding criteria for AECL's research. Questions AECL's qualifications as a moral or ethical authority. Questions the partiality of the process and emphasizes the need for public trust. Questions the validity of a conceptual assessment in the absence of considering specific situations.

KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION: ethics.

Supply and Services, Canada, Ottawa K1A 0S9
NFW 2.2-34-2

AUTHOR
TYPE
ORGANIZATION
TITLE

Rycroft, Al; McGregor, Alayne
assoc

Initiative for the Peaceful Uses of Technology. (Can
TESTIMONY TO THE HOUSE OF COMMONS STANDING COMMITTEE
ENVIRONMENT AND FORESTRY, REGARDING HIGH-LEVEL NUCLEAR
CANADA.

PUBLISH
DATE
ABSTRACT

Canadian Government Publishing Centre, Ottawa, March
87/03/00

A basic guide to the uses and limitations of computer models. Models are simulations of simplified concepts of reality and cannot be relied upon for completely accurate predictions. Gives examples of typographical, logical, false assumptions, conceptual inadequacy errors which have had important consequences. Gives some brief examples of how errors can be avoided.

KEYWORDS	these could have consequences for nuclear waste disp
LOCATION	PUBLIC PARTICIPATION: Canadian Government Publishing Centre, Supply and Se Canada, Ottawa, K1A 0S9
REFERENCE	NFW 2.2-34-2
AUTHOR	Gale, R.W.
TYPE	govt
ORGANIZATION	Office of Civilian Radioactive Waste. (USA).
TITLE	THE DRAFT MISSION PLAN AMENDMENT.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 47-52.
DATE	87/00/00
ABSTRACT	The draft mission plan amendment provides an opportu states and Indian tribes and other involved parties participate in a process that no other nation afford citizens.
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	
AUTHOR	Peelle, E.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	THE MRS (MONITORED RETRIEVABLE STORAGE) TASK FORCE: NON-ECONOMIC INCENTIVES FOR LOCAL PUBLIC ACCEPTANCE PROPOSED NUCLEAR WASTE PACKAGING AND STORAGE FACILIT
PUBLISH	Mar 1987. 11p.
DATE	87/03/00
ABSTRACT	A joint Oak Ridge - Roane County Citizen Task force Department of Energy's (DOE) proposal to site a moni retrievable storage facility in Tennessee in terms o environmental, transportation, and socioeconomic imp case study examines how the task force used mitigati compensation and incentives (economic and non-econom address the problem of distrust of DOE and to change local impact balance from negative to positive.
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	
AUTHOR	Willis, Y.A. (Program Development, Westinghouse Elec Waste Technology Services Div., Madison, PA); Dyes, Harhalakis, G.
TYPE	priv
ORGANIZATION	
TITLE	THE NEED FOR PUBLIC EDUCATION: NUCLEAR WASTE DISPOSA
PUBLISH	P. 93-98. Management of Energy Technology, 1987. New (USA). American Society of Mechanical Engineers. 198
DATE	87/00/00
ABSTRACT	An extensive in-depth public information campaign mu

instituted if the public is to deal with nuclear was
intelligently and reasonably, rather than emotionall
Westinghouse has developed the nuclear waste managem
program, an objective seminar series, to make the ne
information both available and accessible.

KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Babin, R.
priv

THE NUCLEAR POWER GAME.
Black Rose Books. 236 p.
87/00/00

An investigation into Canadian nuclear energy and the popular opposition.

KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Greber, M.A.
acad

THE ONTARIO PUBLIC'S OPINION ABOUT NUCLEAR FUEL WASTE
Conference Proceedings, 2nd International Conference
Radioactive Waste Management, September 7-11, 1986.
86/09/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION:

AUTHOR
TYPE
ORGANIZATION
TITLE

Hoffman, W.D.
priv

PUBLISH

West Valley Nuclear Services Co., Inc., NY (USA).
THE PUBLIC VISITS A NUCLEAR WASTE SITE: SURVEY RESULTS
WEST VALLEY NUCLEAR SERVICES CO.

DATE
ABSTRACT

Waste Management '87: Waste Isolation in the US, Technical
Programs and Public Education. Tucson, AZ, (USA). University of
Arizona Nuclear Engineering Dept. 1987. p. 163-170.
87/00/00

This paper discusses the results of the 1986 survey of the
West Valley Demonstration Project open house where a
nuclear waste cleanup is in progress. Over 1400 people were
polled on what they think is most effective in educating the
public on nuclear waste.

KEYWORDS
LOCATION
REFERENCE

PUBLIC PARTICIPATION: social impacts, education.

AUTHOR

Johnson, Barbara

TYPE
ORGANIZATION

assoc

TITLE

Radioactive Waste Project, Minnesota Public Interest
Foundation. (USA).

PUBLISH

THE ROLE OF CITIZEN PARTICIPATION IN SITING A HIGH-LEVEL
RADIOACTIVE WASTE DISPOSAL FACILITY.

DATE
ABSTRACT

MPIRF, Minneapolis, May, 1986, 7pp.
86/05/06

Emphasizes the need for public participation in any
disposal and siting program, in order to ensure political
feasibility and social acceptability. Citizens participation
helps to establish the moral and ethical parameters for
solutions.

KEYWORDS
LOCATION

PUBLIC PARTICIPATION: disposal and storage alternatives

REFERENCE	anne
AUTHOR	Hoffman, W.D.
TYPE	priv
ORGANIZATION	Nuclear Fuel Services, Inc. West Valley, NY (USA).
TITLE	WEST VALLEY DEMONSTRATION PROJECT: PUBLIC INFORMATION OBJECTIVES, 1988.
PUBLISH	30 September 1987. 16 p.
DATE	87/09/30
ABSTRACT	This report describes the objectives and proposed ac the public information program.
KEYWORDS	PUBLIC PARTICIPATION:
LOCATION	
REFERENCE	
AUTHOR	Jim, R.; Wittman, J.; Tousley, D.R.; Hovis, J.B. (Ya Tribe, Olympia, WA)
TYPE	Post, R.G. (ed.)
ORGANIZATION	assoc
TITLE	YAKIMA TRIBAL PERSPECTIVES ON HIGH-LEVEL SELECTION P
PUBLISH	P. 47-50. Waste Management '87: Waste Isolation in t Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	When congress went through the arduous process of fa comprehensive plan for resolution of the nation's lo nuclear waste problem, it explicitly recognized that federal efforts in this area had been inadequate.
KEYWORDS	PUBLIC PARTICIPATION: native.
LOCATION	
REFERENCE	

[illegible]

PPPP	III	L	OOO	N	N
P P	I	L	O O	N	N
P P	I	L	O O	NN	N
PPPP	I	L	O O	N N	N
P	I	L	O O	N	NN
P	I	L	O O	N	N
P	III	LLLLL	OOO	N	N

PPPP	III	L	OOO	N	N	L	PPPP	CCCC	FFFFF	SSSS
P P	I	L	O O	N	N	L	P P	C	F	S
P P	I	L	O O	NN	N	L	P P	C	F	S
PPPP	I	L	O O	N N	N	L	PPPP	C	FFFF	SSS
P	I	L	O O	N	NN	L	P	C	F	S
P	I	L	O O	N	N	L	P	C	F	S
P	III	LLLLL	OOO	N	N	LLLLL	P	CCCC	F	SSSS

AUTHOR
TYPE
ORGANIZATION
TITLE

Mauthe, Rene.
media

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

ALL IN OUR BACKYARD: WILL CANADA BECOME THE WORLD'S
DUMP?
Alberta (Western) Report (February 29 1988) 15(11):9
88/02/29
ETHICS: international.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Wieser, Anne; Robbins, Walter.
media

CURRENTS OF THOUGHT AND NUCLEAR WASTE.
City Magazine (1987) 9(4):26-28.
87/00/00

ETHICS:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Martin, S.

DISSOLUTION NO SOLUTION. (TO THE DISPOSAL OF RADIOAC
Scram J. May-June 1988. No 65. P. 14-15.
88/05-06/00

The plan by the central electricity generating board
60 tonnes of nuclear waste, currently stored at the
magnox station, and discharge the resulting solution
filtering, into the English Channel, is questioned.
ETHICS: ecological impacts.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Kasperson, Roger E.; Abdollahzadeh, Sassan. (Centre
Technology, Environment and Development, Clark Unive
acad
Nuclear Waste Project Office, State of Nevada Agency
Projects.

TITLE

DISTRIBUTIONAL EQUITY PROBLEMS AT THE PROPOSED YUCCA
FACILITY, DRAFT.

PUBLISH
DATE
ABSTRACT

NWPO-SE-009-88, Carson City, July, 1988, 26pp.
88/07/00

Issues of fairness in equity distribution will be ce
social acceptability and public acceptance of a nucl
siting policy. A conceptual methodology for assessm
various types of inequities arising from repository
developed. A number of approaches are detailed.

KEYWORDS

ETHICS: siting.

LOCATION
REFERENCE

Capitol Complex, Carson City, Nevada 89710
NFW 2.2-35-1

AUTHOR

Fong, J.T. (National Bureau of Standards, Gaithersbu

Bates, J.K.; Seefeldt, W.B. (eds.).
govt
Argonne National Lab. IL (USA).
GLOBAL DATABASE STRATEGY FOR PUBLIC ENGINEERING DECI
P. 45. Scientific Basis for Nuclear Waste Management
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00
A historical review of how engineers contributed to
of societal (public) and individual (private) proble
presented, with emphasis on the last thirty years wh
began to alter drastically the practice of engineeri
concept of a 3-prong representation of the engineeri
making process, i.e. database, analysis, and judgeme
introduced. Three case studies are used: (A) The Nuc
Safety Study of 1975, (B) The Alaska Pipeline Weld D
Assessment Study of 1976, and (C) The Welding Resear
Council-Pressure Vessel Research Committee (PVRC) Ro
Flaw Detection Program (1966-86) for Thick-Section S
ETHICS: decision making, engineering.

Desautels, Louise.
media

NUCLEAIRE: DES REBUTS POUR LES TEMPS FUTURS.
Quebec Science (June 1987) 25(10):14-20.
87/06/00

ETHICS:

PPPP	III	L	OOO	N	N
P P		L	O O	N	N
P P	I	L	O O	NN	N
PPPP	I	L	O O	N	N N
P	I	L	O O	N	NN
P	I	L	O O	N	N

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Golchert, N.W.; Duffy, T.L.

govt

Argonne National Lab. IL (USA).

1986 ANNUAL SITE ENVIRONMENTAL REPORT FOR ARGONNE NATIONAL LABORATORY.

Mar 1987. 115 p.

87/03/00

The results of the environmental monitoring program National Laboratory for 1986 are presented and discussed. The report evaluates the effect of Argonne operations on the environmental measurements were made for a variety of radionuclide surface water, groundwater, soil, grass, bottom sediment, and milk; of the environmental penetrating radiation dose; and a variety of chemical constituents in surface water, groundwater, and Argonne effluent water.

ECOLOGICAL IMPACTS: monitoring.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Miltenberger, R.P.; Royce, B.A.; Naidu, J.R.

govt

Brookhaven National Lab. NY (USA).

1986 ENVIRONMENTAL MONITORING REPORT.

June 1987. 119 p.

87/06/00

The environmental levels of radioactivity and other radionuclides found in the vicinity of BNL during 1986 are summarized in this report.

ECOLOGICAL IMPACTS: monitoring.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Amano, H.; Garten, C.T.Jr.; Lomax, R.D.

govt

Oak Ridge National Lab. TN (USA).

A FIELD SURVEY OF ENVIRONMENTAL TRITIUM IN AREAS ADJACENT TO SOLID-WASTE STORAGE AREAS.

May 1987. 39 p.

87/05/00

A survey of tritium concentrations in surface water, groundwater, and atmospheric moisture was made throughout the Oak Creek Watershed in 1986.

ECOLOGICAL IMPACTS:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE

Irvine, A.R.; Forsberg, C.W.

govt

Oak Ridge National Lab. TN (USA).

ACCEPTANCE CRITERIA CONSIDERATIONS FOR MISCELLANEOUS WASTE.

Jan 1987. 20 p.

87/01/00

ABSTRACT

KEYWORDS
LOCATION

EPA standards set forth limitations regarding releases to the accessible environment adjacent to a geologic repository. ECOLOGICAL IMPACTS: regulations.

REFERENCE

AUTHOR	Goodwin, B.W.; Garisto, N.C.; Barnard, J.W.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited
TITLE	AN ASSESSMENT OF THE LONG-TERM IMPACT OF CHEMICALLY CONTAMINANTS FROM THE DISPOSAL OF NUCLEAR FUEL WASTE
PUBLISH	
DATE	87/00/00
ABSTRACT	
KEYWORDS	ECOLOGICAL IMPACTS: chemistry.
LOCATION	
REFERENCE	
AUTHOR	Ruskbrook, P.E. (ed.)
TYPE	assoc
ORGANIZATION	UKAEA Atomic Energy Research Establishment, Harwell. Environmental and Medical Sciences Div.
TITLE	AN ASSESSMENT OF THE PRELIMINARY MICROBIOLOGICAL STUDIES FROM ELSTOW CONDUCTED BY THE UNIVERSITIES OF LIVERPOOL AND WARWICK.
PUBLISH	April 1987. 78 p.
DATE	87/04/00
ABSTRACT	Two preliminary studies were conducted to establish or absence of micro-organisms in samples of Oxford c Elstow. Bacterial colonies were the dominant organisms.
KEYWORDS	ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	
AUTHOR	Talmage, S.S. Chilton, B.D.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	CLEANUP PROCEDURES AT THE NEVADA TEST SITE AND AT OTHER RADIOACTIVELY CONTAMINATED SITES INCLUDING REPRESENTATIVE OF CLEANUP AND TREATMENT OF CONTAMINATED AREAS.
PUBLISH	September 1987. 50 p.
DATE	87/09/00
ABSTRACT	This review summarizes available information on cleanup procedures. Selected measures that could be useful in reducing the costs of cleaning up radioactively contaminated areas are described.
KEYWORDS	ECOLOGICAL IMPACTS: mitigation.
LOCATION	
REFERENCE	
AUTHOR	Amiro, B.D.; Sheppard, S.C.
TYPE	govt
ORGANIZATION	
TITLE	
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	CONCENTRATION RATIOS OF NATURAL U FOR CATTAIL POLLEN
PUBLISH	3 p. (1987). Reprinted from Health Physics (1987) 52
DATE	87/00/00
ABSTRACT	
KEYWORDS	ECOLOGICAL IMPACTS: vegetation.
LOCATION	
REFERENCE	
AUTHOR	Sheppard, M.I.; Thibault, D.H.; Sheppard, S.C.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	CONCENTRATIONS AND CONCENTRATION RATIOS OF U, AS, AND

PUBLISH	PINE GROWN IN A WASTE-SITE SOIL AND AN EXPERIMENTAL CONTAMINATED SOIL.
DATE	10 p. (1985). Reprinted from Water, Air and soil Pol 26:85-94, 1985.
ABSTRACT	85/00/00
KEYWORDS	ECOLOGICAL IMPACTS: vegetation.
LOCATION	
REFERENCE	
AUTHOR	Platford, R.F.; Joshi, S.R. (Canada Centre for Inla Burlington, Ont.)
TYPE	govt
ORGANIZATION	
TITLE	DOSE RATES TO AQUATIC LIFE NEAR A U WASTE SITE.
PUBLISH	Health Phys. January 1988. V. 54(1) P. 63-68.
DATE	88/01/00
ABSTRACT	Radiation dose rates to aquatic organisms have been from radionuclide levels in fish, in water and in th near an abandoned u waste site.
KEYWORDS	ECOLOGICAL IMPACTS: fish.
LOCATION	
REFERENCE	
AUTHOR	Zach, R.; Amiro, B.D.; Champ, D.R.; Cornett, R.J.; I Killey, R.W.D.; Lee, D.R.; Moltyaner, G.L.; Osborne, Sheppard, M.I.; Sheppard, S.C. (AECL, Pinawa, Manito Whiteshell Nuclear Research Establishment)
TYPE	govt
ORGANIZATION	
TITLE	ENVIRONMENTAL RESEARCH FOR THE CANADIAN NUCLEAR FUEL MANAGEMENT PROGRAM.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. September 8(2-3) P. 197-217.
DATE	87/09/00
ABSTRACT	The objective of the environmental program is to imp generic biosphere model, with suitable parameter val distributions, for probabalistic concept assessments
KEYWORDS	ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	
AUTHOR	McKay, W.A.; Szweda, C.
TYPE	govt
ORGANIZATION	Ukaea Harwell Lab. Environmental and Medical Science
TITLE	FISH RADIOACTIVITY LEVELS IN CUMBRIA.
PUBLISH	Atom, (London). Nov. 1987. No. 373 p. 2-5.
DATE	87/11/00
ABSTRACT	The paper is a summary of a recent report commission Cumbrian Sea Fisheries Committee on radioactivity le and shell fish from off the Cumbrian Coast. A descri given of the sample collection and the sample analys
KEYWORDS	ECOLOGICAL IMPACTS: fish.
LOCATION	
REFERENCE	
AUTHOR	Marshall, E.
TYPE	
ORGANIZATION	
TITLE	HANFORD'S RADIOACTIVE TUMBLEWEED.
PUBLISH	Science (Washington, D.C.). (26 Jun 1987). V. 236 p.

DATE	87/06/26
ABSTRACT	The Department of Energy has not yet settled on a plan dealing with the extensive ground contamination at H. After 44 years of storing radioactive wastes on site temporary measures begin to look permanent; cleanup billions of dollars. Radioactive wastes have been in steel tanks, earthen ditches, trenches, cribs, ponds, underground drains and deep wells. Long-lived transurans have also been buried in boxes or drums that will so Burrowing animals and tumbleweed, with roots that can feet, are spreading the contamination.
KEYWORDS	ECOLOGICAL IMPACTS: vegetation.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	Bechtel National, Inc. TN (USA).
TITLE	MIDDLESEX SAMPLING PLANT AND MIDDLESEX MUNICIPAL LAND SITE ENVIRONMENTAL REPORT, MIDDLESEX, NEW JERSEY: CA 1986.
PUBLISH	May 1987. 88 p.
DATE	87/05/00
ABSTRACT	The MSP and MML sites are part of the formerly utilized remedial action program, a DOE program to decontaminate otherwise control sites where residential radioactive remain from either the early years of the nation's atomic program or commercial operations causing conditions which congress has mandated DOE to remedy. The monitoring of the MSP and MML measures radon gas concentration in
KEYWORDS	external gamma radiation levels; and uranium and radium concentrations in surface water, groundwater, and sediments.
LOCATION	ECOLOGICAL IMPACTS: monitoring, public exposure.
REFERENCE	
AUTHOR	Louderbough, E.T.; Post, R.G.
TYPE	priv
ORGANIZATION	International Technology Corp. NM (USA).
TITLE	MONITORING FOR SALT EFFECTS AT THE WASTE ISOLATION PLANT
PUBLISH	Waste Management '87: Waste Isolation in the US, Technical Programs and Public Education. Tucson, AZ, (USA). University of Arizona Nuclear Engineering Dept. 1987. p. 631-636.
DATE	87/00/00
ABSTRACT	The ecological monitoring program at WIPP is designed to and measure changes in several ecosystem compartment. Measurements of salt displacement is the primary measurement parameter.
KEYWORDS	ECOLOGICAL IMPACTS: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Collins, E.; O'Farrell, T.P.
TYPE	priv
ORGANIZATION	EG and G Energy Measurements, Inc., Goleta, CA (USA)
TITLE	NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS: A REVIEW OF REQUIREMENTS FOR BIOLOGICAL INFORMATION IN FEDERAL, STATE, AND LOCAL ENVIRONMENTAL LAWS AND REGULATIONS. (NNWSI).
PUBLISH	January 1987, 35 p.
DATE	87/01/00
ABSTRACT	Biological information concerning Yucca Mountain col-

KEYWORDS
LOCATION
REFERENCE

1980 is evaluated to determine if it is sufficient to the requirements of the various laws that pertain to environmental protection or to development of waste repositories.

ECOLOGICAL IMPACTS: monitoring, biology.

AUTHOR

Anon.

TYPE
ORGANIZATION
TITLE

Kupferman, S.L. (ed.)

govt

Sandia National Lab. NM (USA).

OVERVIEW OF NARES ABYSSAL PLAIN ENVIRONMENTAL PROGRAM MEETING. (NARES ABYSSAL PLAIN)

PUBLISH

P. a2-a19. Subseabed Disposal Project Annual Report, termination of project: Physical Oceanography and water geochemistry studies, October 1984 through May 1986.

DATE

87/05/00

ABSTRACT

A meeting was held in Albuquerque on March 14 and 15 develop plans for a six-year interdisciplinary research at the Nares abyssal plain and to discuss arrangements

KEYWORDS
LOCATION
REFERENCE

fall 1985 oceanographic mission to the Nares abyssal ECOLOGICAL IMPACTS: marine disposal.

AUTHOR
TYPE
ORGANIZATION

Cohen, J.; Smith, C.F.; Cook, J.R.; King, C.M.

TITLE

Science Applications International Corp., Pleasanton Savannah River Lab., Aiken, SC (USA).

PROBABILISTIC ASSESSMENT OF RADIOLOGICAL IMPACTS FROM TRANSURANICS IN WASTE AT THE SAVANNAH RIVER PLANT.

PUBLISH

1988. 9 p.

DATE

88/00/00

ABSTRACT

These results indicate that, depending on the degree conservatism one desires to apply in selecting input the calculated dose could range from relatively insubstantial values to doses well in excess of current standards for radiation exposure.

ECOLOGICAL IMPACTS: public exposure.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Neuhauser, K.S.; Cashwell, J.W.; Reardon, P.C.; Ostman (Sandia National Labs, Albuquerque, NM); McNair, G.W. Pacific Northwest Labs., Richland, WA).

TYPE
ORGANIZATION
TITLE

priv/govt

International Atomic Energy Agency. Vienna (Austria) PROJECTED ENVIRONMENTAL IMPACTS OF RADIOACTIVE MATERIAL TRANSPORTATION TO THE FIRST US REPOSITORY SITE.

PUBLISH

V.1 P.407-414. Packaging and Transportation of Radioactive Materials (PATRAM '86). Proceedings of an International Symposium on the Packaging and Transportation of Radioactive Materials held in Davos, 16-20 June 1986. Vienna. IAEA 780 p. Proceedings series.

DATE

87/00/00

ABSTRACT

The relative national environmental impacts of transuranic fuel and other nuclear wastes to each of nine repositories in the US were analysed.

ECOLOGICAL IMPACTS: transport, risk analysis.

KEYWORDS
LOCATION

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

govt
Department of the Environment. London (UK).
RADIOACTIVE WASTE MANAGEMENT AND RADIOACTIVITY IN TH
ENVIRONMENT. A REPORT OF RESEARCH COMMISSIONED BY TH
OF THE ENVIRONMENT 1984-1986.
London (UK). H M Stationery Office. Jan 1987. 50 p.
87/01/00
The paper is a report of research commissioned by th
Kingdom Department of the Environment 1984-1986 on '

PUBLISH
DATE
ABSTRACT

KEYWORDS

Waste Management and Radioactivity in the Environmen
contents contain a summary of the major research ach
during this period.
ECOLOGICAL IMPACTS: geology, risk analysis, marine d
thermodynamics.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Guthrie, J.E.; Acres, O.E.; Dunford, W.E.
govt
Atomic Energy of Canada Limited.
RADIOACTIVITY LEVELS IN WINNIPEG RIVER FISH AT THE W
NUCLEAR RESEARCH ESTABLISHMENT NEAR PINAWA, MANITOBA
1986. 78 p.
86/00/00

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

ECOLOGICAL IMPACTS: fish.

AUTHOR
TYPE
ORGANIZATION
TITLE

Arthur, W.J.; Markham, O.D.; Groves, C.R.; Keller, B
National Engineering Lab., Idaho Falls, ID).
govt

PUBLISH
DATE
ABSTRACT

RADIONUCLIDE EXPORT BY DEER MICE AT A SOLID RADIOACT
DISOSAL AREA IN SOUTHERN IDAHO.
Health Phys. January 1987. No. 1 P.45-53.
87/01/00
Concentrations in deer mice tissues collected from a
waste disposal area in southeastern Idaho were signi
higher than those from a control area.
ECOLOGICAL IMPACTS: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

govt
US DOE Assistant Secretary for Nuclear Energy, Washi
Office of Remedial Action and Waste Technology.
REMEDIAL ACTION AT THE WELDON SPRING SITE: DRAFT ENV
IMPACT STATEMENT.

PUBLISH
DATE
ABSTRACT

Feb 1987. 46 p.
87/02/00
Several alternatives are considered for long-term ma
wastes associated with remedial action activities at
Spring site, located about 48 km west of St. Louis,
ECOLOGICAL IMPACTS: mitigation.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE

Anon.
govt

ORGANIZATION
TITLE

REVIEW OF DOE'S COMPLIANCE WITH ENVIRONMENTAL LAWS :
ITS HAZARDOUS AND MIXED RADIOACTIVE-HAZARDOUS WASTES
BEFORE A SUBCOMMITTEE OF THE COMMITTEE ON GOVERNMENT
HOUSE OF REPRESENTATIVES, 99TH CONGRESS, 2ND SESSION
1986.

PUBLISH
DATE
ABSTRACT

Washington, DC. Government Printing Office. 1987. 20
87/00/00

The review focused on compliance with the Resource
and Recovery Act of 1976 and the Comprehensive Envir
Response, Compensation and Liability Act of 1980 to
whether DOE facilities are meeting the environmental
required of private companies.

ECOLOGICAL IMPACTS: regulations, legislation.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Thorson, R.M.
assoc

Mashantucket Pequot Tribe, Ledyard, CT (USA).
REVIEW OF DRAFT CRYSTALLINE REPOSITORY PROJECT REPO
INDIAN RESERVATION): FINAL REPORT.

PUBLISH
DATE
ABSTRACT

1 February 1988. 45 p.

88/02/01

The Mashantucket Pequot tribal council was concerned
possible emplacement of a nuclear waste repository
crystalline rocks of eastern Connecticut and Rhode Is
tribe was especially concerned with the hydrological
because the tribe's lands occur in an area with all
complications cited above, including one of the high
concentrations of large brittle fractures in southern
England.

ECOLOGICAL IMPACTS: native, fractures, hydrology, si

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Looney, B.B.; Pickett, J.B.; King, C.M.; Holmes, W.C
W.F.; Smith, J.A.

govt

Savannah River Lab. SC (USA).

SELECTION OF CHEMICAL CONSTITUENTS AND ESTIMATION OF
FOR ENVIRONMENTAL ANALYSIS OF SAVANNAH RIVER PLANT V
ENVIRONMENTAL INFORMATION DOCUMENT.

PUBLISH
DATE
ABSTRACT

March 1987. 207 p.

87/03/00

Chemical constituents which have been disposed of at
facilities are identified and inventories estimated.
estimates are to be used in assessing the environmen
of various waste management options at the Savannah

ECOLOGICAL IMPACTS: chemistry.

KEYWORDS
LOCATION
REFERENCE

AUTHOR	Golchert, N.W.
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	SITE SURVEILLANCE AND MAINTENANCE PROGRAM FOR PALOS FOR 1986.
PUBLISH	April 1987. 44 p.
DATE	87/00/00
ABSTRACT	The results of the environmental monitoring program site A/plot M in the Palos Park Forest Preserve Area are presented. The monitoring program reflects remed subsequent to the original radiological characteriza site.
KEYWORDS	ECOLOGICAL IMPACTS: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Sharples, F.E.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	STANDARDS FOR REMEDIAL ACTION: HOW CLEAN IS CLEAN.
PUBLISH	February 1987. 4 p.
DATE	87/02/00
ABSTRACT	The particular cleanup standards applied at a remedi site will depend upon a variety of site-specific fac as which of the hazardous waste statutes is jurisdic applied.
KEYWORDS	ECOLOGICAL IMPACTS: mitigation, regulations.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	The Nuclear Waste Project Office. NV (USA).
TITLE	STATE OF NEVADA COMMENTS ON THE U.S. DEPARTMENT OF E ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED HIGH-LEVEL WASTE SITE AT YUCCA MOUNTAIN. VOL I.
PUBLISH	March 1985. 200 p.
DATE	85/03/00
ABSTRACT	The State of Nevada offers comments on the US DOE Dr Environmental Assessment for the Proposed High-Level Waste Site at Yucca Mountain.
KEYWORDS	ECOLOGICAL IMPACTS:
LOCATION	
REFERENCE	NFW 2.2-36-1
AUTHOR	
TYPE	govt
ORGANIZATION	The Nuclear Waste Project Office. NV (USA).
TITLE	STATE OF NEVADA COMMENTS ON THE U.S. DEPARTMENT OF E ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED HIGH-LEVEL WASTE SITE AT YUCCA MOUNTAIN. VOL II.
PUBLISH	March 1985. 200 p.
DATE	85/03/00
ABSTRACT	The State of Nevada offers comments on the US DOE Dr Environmental Assessment for the Proposed High-Level Waste Site at Yucca Mountain.

KEYWORDS
LOCATION
REFERENCE

ECOLOGICAL IMPACTS:

NFW 2.2-36-2

AUTHOR
TYPE
ORGANIZATION
TITLE

Garten, C.T.; Lomax, R.D.
govt
Oak Ridge National Lab. TN (USA).
STRONTIUM-90 CONTAMINATION IN VEGETATION FROM RADIOA
SEEPAGE AREA AT ORNL, AND THEORETICAL CALCULATIONS O
ACCUMULATION BY DEER.

PUBLISH
DATE
ABSTRACT

June 1987. 60 p.
87/06/00
This report describes data obtained during a prelimi
characterization of 90sr levels in browse vegetation
vicinity of seeps adjacent to ORNL solid waste stora
where deer were suspected to accumulate 90sr through
chain.

ECOLOGICAL IMPACTS:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Tyler, P.A. (University Coll. of Swansea, UK)
acad
Department of the Environment. London (UK).
STUDIES OF THE REPRODUCTIVE BIOLOGY OF DEEP-SEA MEGA
FINAL REPORT.

PUBLISH
DATE
ABSTRACT

July 1987. 65 p.
87/07/00
The final report describes the general biology and e
15 holothurians, 3 asteroids, 2 zoanthids and 1 crus
studied in reports I-XIII, the sampling methods used
station data.

ECOLOGICAL IMPACTS: biology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Restrepo, L.F.; Dietesfeld, C.A. (ed.)
priv
Rockwell International Corp. Golden, CO. Rocky Flats
STUDY PLAN FOR THE SENSITIVITY ANALYSIS OF THE TERRA
ATMOSPHERIC CODE (TRAC).

PUBLISH
DATE
ABSTRACT

18 August 1987. 15 p.
87/08/18
Rocky Flats Plant is presently developing a computer
model the dispersion of potential or actual releases
radioactive or toxic materials to the environment, a
the public consequences from these releases.

KEYWORDS
LOCATION
REFERENCE

ECOLOGICAL IMPACTS: public exposure.

AUTHOR
TYPE
ORGANIZATION
TITLE

Sumerling, T.J.; Sweeney, B.J. (Associated Nuclear S
Epsom, UK)

PUBLISH
DATE
ABSTRACT

Department of the Environment. London UK; Associated
Services, Epsom, (UK).
THE ESTIMATION OF RADIOLOGICAL IMPACT FROM THE DISPOS
RADIONUCLIDES WITH DOMESTIC AND COMMERCIAL WASTES.
April 1987. 119 p.
87/04/00
In the UK, limited quantities of radionuclides are d

KEYWORDS
LOCATION
REFERENCE

with non-radioactive domestic and commercial wastes terms of exemption orders or authorizations granted radiochemical inspectorate. This report presents a m and basis for the calculation of individual and coll to workers and to members of the public from such di ECOLOGICAL IMPACTS: occupational exposure, public ex

AUTHOR
TYPE
ORGANIZATION

Gaudie, S.C.; Greenfield, B.F.; Spindler, M.W.; Wilk (UKAEA Atomic Energy Research Establishment, Harwell assoc

TITLE

Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).

PUBLISH

THE INFLUENCE OF ORGANIC WASTE MATERIAL ON THE NEAR TERM.

DATE

P. 90. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p. 87/00/00

ABSTRACT

Published in summary form only.

KEYWORDS

ECOLOGICAL IMPACTS: radionuclide migration.

LOCATION

REFERENCE

AUTHOR
TYPE
ORGANIZATION

McCabe, A.M.

TITLE

Central Electricity Generating Board, Berkeley, CA. Nuclear Labs, (USA).

PUBLISH

THE POTENTIAL SIGNIFICANCE OF MICROBIAL ACTIVITY IN WASTE DISPOSAL.

DATE

December 1987. 58 p. 87/12/00

ABSTRACT

The aim of this report is to assess the potential si microbial activity in radioactive waste disposal.

KEYWORDS

ECOLOGICAL IMPACTS: chemistry, radionuclide migratio

LOCATION

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

media

THE SELLAFIELD DISCHARGES.

Ecologist. 1986. V. 16(5) p. 182.

86/00/00

ECOLOGICAL IMPACTS:

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Steele, W.D.
priv
UNC Geotech. CO (USA).
CONSTRUCTION AND TESTING OF A BLOWER-DOOR ASSEMBLY
OF AIR PRESSURE WITHIN STRUCTURES.

Sept. 1987. 45 p.
87/09/00

The technical measurements center is evaluating several methods to decrease the time required to determine an annual radon-daughter concentration in structures. One method is stabilizing air pressure within the structure at a constant pressure. This report describes the construction and testing of a blower-door system to maintain a constant differential air pressure within a structure.

EARTH SCIENCE: engineering.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

acad

EFFECTS ON FISSURE CALCITE BY RECHARGE WATER: SOME
RELATED TO ¹⁴C DATING OF GROUNDWATER.

Nuclear Waste Management Symposium. Stockholm (Sweden)
9-11, 1985. p. 129.

85/09/00

EARTH SCIENCE: hydrogeology, groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Germain, R.

govt

French Atomic Energy Commission. (France).

EXPERIMENTAL STUDY OF LONG-LIVED RADIONUCLIDES TRANSFER
(AMERICIUM, PLUTONIUM, TECHNETIUM) BETWEEN LABELLED
AND ANNELIDAE (NEREIS DIVERSICOLOR, ARENICOLA MARINA)
CEC Report EUR 9214 EN. 1984. p. 327-341.

84/00/00

The bioavailability of sediments labeled by americium-241, plutonium 238 or 239, and technetium 99 to two marine annelids was investigated.

EARTH SCIENCE: chemistry.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Brotzen, O.

assoc

Canadian Nuclear Society. (Canada).

GROUNDWATER TRAVEL TIMES IN GRANITE AND GNEISS.

Canadian Nuclear Society 2nd International Conference on
Radioactive Waste Management. Sept. 7-11, 1986. p. 1

DATE
ABSTRACT
KEYWORDS
LOCATION

86/09/00

EARTH SCIENCE: groundwater.

REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	HUMIC SUBSTANCES IN GROUNDWATERS.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 525.
DATE	85/09/00
ABSTRACT	
KEYWORDS	EARTH SCIENCE: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Holcomb, D.J.; Shields, M.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	HYDROSTATIC CREEP CONSOLIDATION OF CRUSHED SALT WITH
PUBLISH	October 1987. 125 p.
DATE	87/10/00
ABSTRACT	Adding small amounts of water to the as-mined salt r consolidation rate such that times required for the an effective barrier to fluid flow are of the order at stresses in the 1 MPA range.
KEYWORDS	EARTH SCIENCE: salt.
LOCATION	
REFERENCE	
AUTHOR	Kimbrell, A.; Taylor, P.
TYPE	govt
ORGANIZATION	US Army Corps of Engineers. MS (USA).
TITLE	MICROFINE GROUTING IN TIGHT FRACTURES.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 667-672.
DATE	87/00/00
ABSTRACT	Microfine cements were used to grout tight fractures McNary Dam. Six boreholes were grouted with differen mixes. The results indicate that tight fractures can with microfine cements.
KEYWORDS	EARTH SCIENCE: cement.
LOCATION	
REFERENCE	
AUTHOR	Morner, Nils-Axel; Somi, Edmond (Paleogeophysics and Geological Institute, Stockholm) and Zuchiewicz, Wi (Institute of Geological Sciences, Jagiellonian Univ Krakow)
TYPE	
ORGANIZATION	acad
TITLE	NEOTECTONICS AND PALEOSEISMICITY WITHN THE STOCKHOLM INTRACRATONAL REGION IN SWEDEN.
PUBLISH	Tectonophysics, Elsevier Science Publishers, Amsterd press). Refer to TECTO 02310.
DATE	89/00/00
ABSTRACT	Recent studies of post-glacial faulting and evidence neo-tectonic disturbances in Sweden invalidates the geodynamic concept for safe disposal of high-level w bedrock.
KEYWORDS	EARTH SCIENCE: geology
LOCATION	Paleogeophysics and Geodynamics, University of Stock

REFERENCE	S-10691, Stockholm, Sweden anne
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	RADIATION DAMAGE IN NATURAL TITANITE BY CRYSTAL STRU ANALYSIS.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 363.
DATE	85/09/00
ABSTRACT	
KEYWORDS	EARTH SCIENCE:
LOCATION	
REFERENCE	
AUTHOR	Lau, F.
TYPE	priv
ORGANIZATION	
TITLE	RADIOACTIVITY AND NUCLEAR WASTE DISPOSAL.
PUBLISH	New York, NY. John Wiley & Sons Inc. 1987. 637 p.
DATE	87/00/00
ABSTRACT	The nature and consequences of ionizing radiation ar the physical, biological, and medical level. Account of the origins of radioactive waste in various count the world.
KEYWORDS	EARTH SCIENCE: biology.
LOCATION	
REFERENCE	
AUTHOR	Elder, J.C.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	TA-2 WATER BOILER REACTOR (PHASE 1) DECOMMISSIONING: GROUND WATER INTERFERENCE DURING OUTDOOR COMPONENT R SOIL DECONTAMINATION.
PUBLISH	1987. 10 p.
DATE	87/00/00
ABSTRACT	This report deals with the extensive groundwater tha
KEYWORDS	encountered in excavations as structures, pipe and s contaminated with CS-137 removed during the outdoor TA-2 water boiler reactor decommissioning and how co of nearby surface water was avoided.
LOCATION	EARTH SCIENCE: groundwater.
REFERENCE	
AUTHOR	Apps, J.A.; Neil, J.M.; Jun, C.H.
TYPE	govt
ORGANIZATION	Nuclear Regulatory Commission, Washington, D.C. (USA) Berkeley National Lab. (USA).
TITLE	THERMOMECHANICAL PROPERTIES OF GIBBSITE, BAYERITE, B DIASPORE, AND THE ALUMINATE ION BETWEEN 0 AND 350 DEGREE/CELSIUS.
PUBLISH	Jan. 1989. 346 p.
DATE	89/01/00
ABSTRACT	A requirement for modelling the chemical behaviour o in a nuclear waste repository is accurate thermodyna pertaining to the participating minerals and aqueous particular, it is important that the thermodynamic p the aluminate ion be accurately determined, because

AUTHOR	Klenze, R.; Kim, J.I. (Technische Univ. Muenchen, Germany, F.R. Inst. fuer Radiochemie)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	A DIRECT SPECIATION OF TRANSURANIUM ELEMENTS IN NATU
PUBLISH	SYSTEMS BY LASER-INDUCED PHOTOACOUSTIC SPECTROSCOPY. P. 138. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Vuorinen, Ulla (Finland).
TYPE	
ORGANIZATION	
TITLE	A REVIEW ON COLLOIDAL SYSTEMS IN GENERAL AND IN RESP
PUBLISH	NUCLEAR WASTE DISPOSAL.
DATE	Apr 1987. 125 p.
ABSTRACT	87/04/00 Recently, the possible importance of colloids in con nuclear waste disposal, especially in radionuclide m has been emphasized. This study is a literature surv consisting first of a general approach on colloidal their properties. Then a review on natural groundwat (clays and organs) is given following descriptions o methods to study colloids. Lastly the role of colloi nuclear waste disposal is discussed.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Veal, B.W.; Mundy, J.N.; Lam, D.J. (Argonne National Freeman, A.J. (Northwestern Univ., Evanston, IL. Dep Physics and Astronomy); Lander, G.H. (Commission of Communities, Karlsruhe, Germany, F.R. European Inst. Transuranium Elements) (eds.)
TYPE	acad/assoc
ORGANIZATION	
TITLE	ACTINIDES IN SILICATE GLASSES. CHAPTER 4.
PUBLISH	P. 271-309. Handbook on the Physics and Chemistry of Actinides. Vol. 5/ Amsterdam, Netherlands. 1987. 385
DATE	87/00/00
ABSTRACT	In this chapter the physics and chemistry are consid silicates containing dissolved actinides attention i on transuranic solutes.
KEYWORDS	CHEMISTRY: glass.
LOCATION	
REFERENCE	

AUTHOR	Ho, C.H.; Miller, N.H.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.

TITLE	ADSORPTION OF URANYL SPECIES FROM BICARBONATE SOLUTION ON HEMATITE PARTICLES.
PUBLISH	7 p. (1986). Reprinted from Journal of Colloid and Interface Science 110(1):165-171, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Dill, J.A.; Jones, T.E.; Marcy, A.D.; Baechler, M.O.
TYPE	priv
ORGANIZATION	Rockwell International Corp. WA (USA).
TITLE	AN EVALUATION OF THE STABILITY OF SYNTHETIC GRANULAR GROUNDWATER FORMULATIONS GR-3 AND GR-4.
PUBLISH	Mar 1987. 44 p.
DATE	87/03/00
ABSTRACT	Simple solubility calculations indicate that synthetic groundwater formulations GR-3 and GR-4 may be stable with respect to the precipitation of certain components.
KEYWORDS	CHEMISTRY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Bennett, B.A.; Rees, L.V.C. (Imperial Coll. of Science and Technology, London, UK. Dept. of Chemistry)
TYPE	acad
ORGANIZATION	Department of the Environment. London (UK).
TITLE	APPLICATION OF MOESSBAUER SPECTROSCOPY TO THE STUDY OF ADSORBED ON DEEP-SEA SEDIMENTS.
PUBLISH	March 1987. 52 p.
DATE	87/03/00
ABSTRACT	A neptunium moessbauer spectrometer was constructed and used to obtain moessbauer spectra of NPAL laves phase alloy obtained from Neptunium was sorbed onto a calcareous deep sea sediment from sea water, using a successive-loading technique. This study demonstrated that moessbauer spectroscopy has great potential as an aid to understanding the mechanism of actinide sorption in natural systems.
KEYWORDS	CHEMISTRY: radionuclide migration, marine disposal.
LOCATION	
REFERENCE	
AUTHOR	Stuckless, J.S.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	APPLICATIONS OF U-TH-PB ISOTOPE SYSTEMATICS TO THE STUDY OF RADIOACTIVE WASTE DISPOSAL.
PUBLISH	Applied Geochemistry. Jan-Feb. 1987. V. 2(1) p. 136.
DATE	87/01/00
ABSTRACT	Abstract only.
KEYWORDS	CHEMISTRY: disposal and storage alternatives.
LOCATION	
REFERENCE	
AUTHOR	Bajo, C. (Nationale Genossenschaft zur Lagerung Radioaktiver Abfalle, Baden, Switzerland); Hoehn, E.; Keil, R. (Eidgenoessisches Inst. fuer Reaktorforschung, Wueren, Switzerland)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. G.

TITLE	Radiochemie; Commission of the European Communities, (Belgium).
PUBLISH	CHEMICAL CHARACTERIZATION OF THE GROUND WATER FROM T SITE AT THE GRIMSEL ROCK LABORATORY.
DATE	P. 84. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
ABSTRACT	87/00/00
KEYWORDS	Published in summary form only.
LOCATION	CHEMISTRY: groundwater.
REFERENCE	
AUTHOR	Taylor, P.; Ashmore, S.D.; Owen, D.G.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	CHEMICAL DURABILITY OF SOME SODIUM BOROSILICATE GLAS BY PHASE SEPARATION.
PUBLISH	6 p. (1987). Reprinted from the Journal of the Ameri Society (1987) 70(5):333-338.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: glass.
LOCATION	
REFERENCE	
AUTHOR	Sood, D.D.;
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	CHEMICAL INVESTIGATIONS RELEVANT TO PLUTONIUM RECYCL
PUBLISH	Proceedings of an International Symposium on the Bac Nuclear Fuel Cycle: Strategies and Options. Jointly the International Atomic Energy Agency and the Nucle Agency of the OECD and held in Vienna, 11-15 May 198
DATE	561-562.
ABSTRACT	87/05/00
KEYWORDS	Poster presentation.
LOCATION	CHEMISTRY: volume reduction.
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R..
TITLE	Radiochemie; Commission of the European Communities, (Belgium).
PUBLISH	CHEMISTRY AND MIGRATION BEHAVIOR OF ACTINIDES AND FI PRODUCTS IN THE GEOSPHERE. ABSTRACTS.
DATE	1987. 196 p.
ABSTRACT	87/00/00
KEYWORDS	The scope of the conference was focused on recent de three key areas, namely, the primary phenomena in nu geochemistry, the migration behavior in geologic med modelling process.
LOCATION	CHEMISTRY: radionuclide migration, modelling.
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	CHEMISTRY DIVISION: ANNUAL REPORT FOR PERIOD ENDING

PUBLISH
DATE
ABSTRACT

1987.

Aug. 1987. 148 p.

87/08/00

This report is divided into the following sections: chemistry; aqueous chemistry at high temperatures and geochemistry of crustal processes at high temperatures and pressures; chemistry of advanced inorganic materials and dynamics of advanced polymeric materials; chemistry of transuranium elements and compounds; separations chemistry and catalysis in molten salts; surface science to heterogeneous catalysis; electron spectroscopy; chemistry related to nuclear waste disposal and more.

CHEMISTRY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Lieser, K.H.; Steinkopff, T.

govt

Technische Hochschule Darmstadt (FRG).

CHEMISTRY OF RADIOACTIVE IODINE IN THE HYDROSPHERE AND GEOSPHERE.

PUBLISH
DATE
ABSTRACT

Radiochimica Acta. 1989. V. 46(1) p. 49-55.

89/00/00

The chemistry of iodine in the hydrosphere is discussed. Sorption of radioactive iodine on sediments from the area above the salt dome at Gorleben is investigated at low salt concentrations.

CHEMISTRY: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Ho, C.H.; Miller, N.H.

assoc

Canadian Nuclear Society. (Canada).

CHEMISTRY OF URANIUM COLLOIDS IN GROUNDWATER ENVIRONMENT

Canadian Nuclear Society 2nd International Conference on Radioactive Waste Management. Sept. 7-11, 1986. p. 6

86/09/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

CHEMISTRY: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Ross, C.A.M.; Degueldre, C.; Ivanovich, M.; Longworth, B. (CEC); Chapman, N.B. (BGS).

Commission of the European Communities, Luxembourg. COLLOID BENCHMARK EXERCISE: AN INTERLABORATORY STUDY AND CHARACTERIZATION TECHNIQUES FOR NATURAL COLLOIDS IN GROUNDWATER.

PUBLISH

p. 314-347. Natural Analogues in Radioactive Waste Disposal. Proceedings of a Symposium Organized by the CEC and EC, Brussels, BE, on 28-30 April 1987. London. Graham and Trotter. 1987. 506 p. Radioactive Waste Management Series.

87/04/00

DATE
ABSTRACT

This paper presents the results of a comparative study of methods of colloid sampling.

CHEMISTRY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR	Belam, B.S. (Mississippi State Univ., Itta Bena, USA
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	COLLOIDAL ABSORPTION OF CATIONS AND IT'S APPLICATION
	RADIOACTIVE WASTE MANAGEMENT.
PUBLISH	P. 131. Chemistry and Migration Behavior of Actinide
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Baumann, E.W.; Coleman, C.J.; Darraker, D.G.; Scott,
TYPE	govt
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	COLORMETRIC DETERMINATION OF FE(II)/FE(III) RATIO IN
PUBLISH	1987. 13 p.
DATE	87/00/00

ABSTRACT	A colormetric method has been developed to determine
	FE(II)/FE(III) ratio in glass containing nuclear was
KEYWORDS	CHEMISTRY: waste characterization.
LOCATION	
REFERENCE	

AUTHOR	Atkins, M.; Beckley, A.N.; Glasser, F.P.; MacPhee, D
	Univ., UK)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	CONDITIONING EFFECT OF CEMENTS ON WASTE FORM SPECIAT
	NEAR FIELD ENVIRONMENT.
PUBLISH	P. 43. Chemistry and Migration Behavior of Actinides
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	CHEMISTRY: cement, waste characterization.
LOCATION	
REFERENCE	

AUTHOR	Fielding, P.E.; White, T.J. (Department of Chemistry
	of New England, Australia)
TYPE	acad
ORGANIZATION	
TITLE	CRYSTAL CHEMICAL INCORPORATION OF HIGH-LEVEL WASTE S
	ALUMINOTITANATE-BASED CERAMICS: VALENCE, LOCATION, R
	DAMAGE, AND HYDROTHERMAL DURABILITY.
PUBLISH	J. Mater. Res. (May 1987) 2(3):387-414.
DATE	87/05/00
ABSTRACT	A compilation is made of the crystallographic mechan
	(simulated) radwaste species are incorporated in the
	phases zirconolite, perovskite, hibonite, and "holla
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Gray, W.J.
TYPE	priv

ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	DATA REPORT ON GAMMA RADIOLYSIS TESTS ON PBB1 AND P
PUBLISH	SALT REPOSITORY PROJECT.
DATE	Mar 1987. 18 p.
ABSTRACT	87/03/00 The tests described in this data report are describe
	986 Technical Program Plan (TPP), WBS element 0302 -
	radiolysis, for the waste package program at Pacific
	Laboratory (PNL), conducted for the Salt Repository
	through the Office of Civilian Radioactive Waste Man
	Department of Energy.
KEYWORDS	CHEMISTRY: salt.

LOCATION	
REFERENCE	
AUTHOR	Gray, W.J.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	DATA REPORT ON LEACH TESTS OF PU-DOPED UO2 IN PBB1 F
PUBLISH	REPOSITORY PROJECT.
DATE	October 1987. 25 p.
ABSTRACT	87/10/00 This report provides results from a series of leach
	conducted using nonirradiated uranium dioxide doped
	plutonium to simulate the alpha activity of spent fu
	used in recent spent fuel leach tests.
KEYWORDS	CHEMISTRY: salt, leaching.
LOCATION	
REFERENCE	

AUTHOR	Nitsche, H.; Lee, S.C.; Gatti, R.C.
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	DETERMINATION OF PLUTONIUM OXIDATION STATES AT TRACE
PUBLISH	PERTINENT TO NUCLEAR WASTE DISPOSAL.
DATE	April 1987. 27 p.
ABSTRACT	87/04/00 A scheme was developed for the determination of oxid
	of plutonium in environmental samples. The method in
	combination of solvent extractions and coprecipitati
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Stammose, D.; Tran, T.M. (CEA Centre D'Etudes Nuclea
TYPE	Fontenay-aux-Roses, France.)
ORGANIZATION	assoc Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	DETERMINATION OF SPECIES PRESENT IN LEACHATES OF NUC
PUBLISH	P. 123. Chemistry and Migration Behavior of Actinide
DATE	Products in the Geosphere. Abstracts. 1987. 196 p.
ABSTRACT	87/00/00
KEYWORDS	Published in summary form only.
LOCATION	CHEMISTRY: leaching.
REFERENCE	

AUTHOR	Wieczorek, H.; Oser, B. (Kernforschungszentrum, Karl
	Germany, F.R.); Deckwer, W.D. (Technische Hochshcule

TYPE	Germany, F.R.).
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	DEVELOPMENT AND ACTIVE DEMONSTRATION OF ACID DIGESTIBLE BURNABLE PLUTONIUM BEARING SOLID WASTES. PART 1. RES
PUBLISH	2. TABLES AND FIGURES.
DATE	1987. 252 p.
ABSTRACT	87/00/00 The investigations were focussed on the active demonstration of the process in a technical scale plant by treatment of waste which contained about 7 kg of plutonium.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Ivanovich, M.; Longworth, G.; Wilkins, M.A.
TYPE	
ORGANIZATION	UKAEA Harwell Lab. Nuclear Physics Div.; Department of Environment, London (UK).
TITLE	DEVELOPMENT OF NATURAL COLLOID SAMPLING AND CHARACTERIZATION TECHNIQUES. FINAL REPORT APRIL 1986- MARCH 1987.
PUBLISH	November 1987. 28 p.
DATE	87/11/00
ABSTRACT	A sampling technique based on diafiltration has been developed for the in situ collection of colloids from groundwater. There is some evidence that particle aggregation can occur during storage and possibly during concentration.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Forstner, R.; Schooner, J.
TYPE	acad
ORGANIZATION	Technical University of Hamburg. (FRG).
TITLE	DIAGENESIS OF CHEMICAL ASSOCIATIONS OF CS-137 AND OTHER ARTIFICIAL RADIONUCLIDES IN RIVER SEDIMENTS.
PUBLISH	Env Technology Letters. July 1984. V. 5(7). p. 295-3
DATE	84/07/00
ABSTRACT	Sediments were sampled upstream and downstream of three power plants located on the Neckar, Danube, and Weser in West Germany. The effects of diagenesis on the chemical associations of Cs-137, cobalt 60, and other artificial radionuclides were investigated. Chemical extraction experiments indicate that artificial radionuclides in aquatic systems are generally associated with more labile solid phases than stable counterparts.
KEYWORDS	CHEMISTRY: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Muurinen, A.; Penttilae-Hiltunen, P.; Rantanen, J. (Research Centre of Finland, ESPOO).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.)
ORGANIZATION	govt Argonne National Lab. IL (USA).

TITLE	DIFFUSION MECHANISMS OF STRONTIUM AND CESIUM IN COMPACTED BENTONITE.
PUBLISH	P. 803-812. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
DATE	
ABSTRACT	In this research, the diffusion of strontium and cesium in bentonite slabs in stationary state has been measured.
KEYWORDS	CHEMISTRY: radionuclide migration.
LOCATION	
REFERENCE	

AUTHOR	Robin, M.J.L.; Gillham, R.W.; Oscarson, D.W.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	DIFFUSION OF STRONTIUM AND CHLORIDE IN COMPACTED CLAY MATERIALS.
PUBLISH	Reprinted from the Soil Science Society of America Journal (September-October 1987) 51(5):1102-1108.
DATE	87/09/00
ABSTRACT	
KEYWORDS	CHEMISTRY: clay.
LOCATION	
REFERENCE	

AUTHOR	Stroes-Gascoyne, S.; Johnson, L.H.; Beeley, P.A.; Seaborn, D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	DISSOLUTION OF CANDU UO2 FUEL AT VARIOUS TEMPERATURE CONDITIONS.
PUBLISH	10 p. (1985). Reprinted from Materials Research Society Proceedings 50, Scientific Basis for Nuclear Waste Management IX, p. 317-326, 1985.
DATE	85/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: dissolution.
LOCATION	
REFERENCE	

AUTHOR	Hayward, P.J.; Vance, E.R.; Doern, D.C.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	DTA/SEM STUDY OF CRYSTALLIZATION IN SPHENE GLASS-CERAMICS.
PUBLISH	Reprinted from the American Ceramic Society Bulletin 66(11):1620-1626.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: glass.
LOCATION	
REFERENCE	

AUTHOR	Reed, D.T.; Van Konynenburg, R.A.
TYPE	govt

ORGANIZATION	Argonne National Lab. IL (USA); Lawrence Livermore National Lab. CA (USA).
TITLE	EFFECT OF IONIZING RADIATION ON MOIST AIR SYSTEMS.
PUBLISH	1987, 14 p.
DATE	87/00/00

ABSTRACT	The radiation chemistry of nitrogen/oxygen/water systems are reviewed. General radiolytic effects in dry nitrogen systems are relatively well characterized. Mechanism from the studies reviewed are summarized and discuss relation to characterizing the gas phase during the period of a repository in tuff.
KEYWORDS	CHEMISTRY: tuff.
LOCATION	
REFERENCE	
AUTHOR	Gray, W.J.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	EFFECTS OF RADIATION ON THE OXIDATION POTENTIAL OF S
PUBLISH	October 1987. 18 p.
DATE	87/10/00
ABSTRACT	Two different types of experiments have shown that a gamma radiation each increase the redox potential of brines.
KEYWORDS	CHEMISTRY: salt.
LOCATION	
REFERENCE	
AUTHOR	Bridger, N.J.; Turner, A.D.
TYPE	govt
ORGANIZATION	Ukaea Headquarters. (UK).
TITLE	ELECTROCHEMICAL ION EXCHANGE. (INCLUDING RADIOACTIVE
PUBLISH	16 Sept. 1987. 12 March 1986. 4 p.
DATE	86/03/12
ABSTRACT	In a method of electrochemically removing ions from solution by establishing an electrochemical cell where solution, as cell electrolyte, is caused to flow between working electrode that includes an ion exchange material, second electrode that optionally includes an ion exchange material, the polarity of the cell is repeatedly reversed.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Morita, Yasuji; Kubota, Masumitsu (Japan Atomic Energy Inst., Tokai, Ibaraki. Tokai Research Establishment)
TYPE	
ORGANIZATION	JNSTA
TITLE	EXTRACTION OF PENTAVALENT NEPTUNIUM WITH DI-ISODECYL ACID.
PUBLISH	J. Nucl. Sci. Technol. (Tokyo). (Mar 1987) 24(3):227
DATE	87/03/00
ABSTRACT	As a fundamental study for separating neptunium from radioactive waste, the mechanism and the rate of extraction of pentavalent neptunium with DIDPA were investigated.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Zouad, S.; Loos-Neskovic, C.
TYPE	govt
ORGANIZATION	Laboratoire d'Analyse par Activation Pierre Sue, Centre Nucleaires de Saclay, 91-GIF-sur-Yvette (France).
TITLE	FIXATION OF STRONTIUM ON POLYANTIMONIC ACID.
PUBLISH	Journal of Radioanalysis Nuclear Chemistry. -Article 1987. p. 337-349.

DATE	87/04/00
ABSTRACT	The fixation mechanisms of strontium on polyantimony were studied in order to choose the best recovery cycle from nuclear wastes. The composition and structure, and capacity were determined.
KEYWORDS	CHEMISTRY: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Moody, J.B.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	FLUID INCLUSION BRINE COMPOSITIONS FROM PALO DURO BASIN SITES.
PUBLISH	Proceedings of Salt Repository Project's Workshop in Migration. March 1987, p. 8-9, Appendix/C.59-C.64.
DATE	87/03/00
ABSTRACT	The fluid inclusion analyses were done on salt samples from San Andres Cycle 4 and 5. The stable isotope composition of fluid inclusion brines was measured on duplicate samples from the same fluid inclusion brine for correlation with geochemical content with the stable isotopic content.
KEYWORDS	CHEMISTRY: salt.
LOCATION	
REFERENCE	
AUTHOR	Bruton, C.J.; Shaw, H.F.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA (USA).
TITLE	GEOCHEMICAL SIMULATION OF REACTION BETWEEN SPENT FUEL AND J-13 WATER AT 250C AND 900C.
PUBLISH	November 1987. 12 p.
DATE	87/11/00
ABSTRACT	Geochemical simulations of the degradation of spent fuel form in the presence of groundwater at the candidate Yucca Mountain, Nevada repository have been carried out to predict elemental concentrations in solution and to evaluate potential radionuclide-bearing precipitates.
KEYWORDS	
LOCATION	
REFERENCE	CHEMISTRY: groundwater, geology.
AUTHOR	Ross, J.D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	GEOCHEMISTRY OF DISSOLVED NOBLE AND ATMOSPHERIC GASES IN DIVERSE PLUTONIC ENVIRONMENTS IN THE PRECAMBRIAN SHIELD OF CANADA.
PUBLISH	Applied Geochemistry. Jan-Feb. 1987. V. 2(1) p. 136-146.
DATE	87/01/00
ABSTRACT	Abstract only.
KEYWORDS	CHEMISTRY: geology.
LOCATION	
REFERENCE	
AUTHOR	Curtis, D.B.; Capps, J.H.; Errin, R.E.; Rokop, D.J.
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	GEOCHEMISTRY OF NATURAL TECHNETIUM AND PLUTONIUM.
PUBLISH	P. 735-736. Scientific Basis for Nuclear Waste Management.

DATE	Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
ABSTRACT	Technetium and plutonium in unprocessed nuclear reactors are major concerns with regard to their containment in the geologic environment. Both nuclides have long half-lives; therefore, they will exist long after engineered barriers are considered reliable.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Von Damm, K.L.; Johnson, K.O.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	GEOCHEMISTRY OF SHALE GROUNDWATERS: RESULTS OF PRELIMINARY LABORATORY LEACHING EXPERIMENTS.
PUBLISH	September 1987, 34 p.
DATE	87/09/00
ABSTRACT	Twelve shales were reacted with distilled water at 21000C; the composition of the waters and the mineralogy determined before and after reaction.
KEYWORDS	CHEMISTRY: groundwater, shale.
LOCATION	
REFERENCE	
AUTHOR	Kerrisk, J.F.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	GROUNDWATER CHEMISTRY AT YUCCA MOUNTAIN, NEVADA, AND
PUBLISH	February 1987. 124 p.
DATE	87/02/00
ABSTRACT	The chemistry of groundwater at Yucca Mountain and has been reviewed and compared with the chemistry of water at Nevada test site and surrounding areas.
KEYWORDS	CHEMISTRY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Hayward, P.J.; Vance, E.R.; Cann, C.D.; George, I.M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	INFLUENCE OF HEAT TREATMENT AND REDOX CONDITIONS ON CRYSTALLIZATION OF TITANOSILICATE GLASS-CERAMICS.
PUBLISH	8 p. (1986). Reprinted from Advances in Ceramics 20: Waste Management II, p. 215-222, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: glass.
LOCATION	
REFERENCE	
AUTHOR	Lang, H.; Moser, H. (Gesellschaft fuer Strahlen und Umweltforschung M.B.H. Muenchen, Neuherberg, Germany fuer Hydrologie)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R.G. Radiochemie; Commission of the European Communities, (Belgium).
TITLE	INTERPRETATION OF SORPTION-DESORPTION BEHAVIOR OF RA ²⁺ , Cs ⁺ AND I ⁻ BY MEANS OF ISOTHERMS.
PUBLISH	P. 42. Chemistry and Migration Behavior of Actinides

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Products in the Geosphere. Abstracts. 1987. 196 p.
87/00/00
Published in summary form only.
CHEMISTRY: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE

Bibler, J.P.; Wallace, R.M.
priv
Du Pont de Nemours (E.I.) and Co., Aiken, SC (USA).
ION EXCHANGE PROCESSES FOR CLEAN-UP OF DILUTE WASTE
THE F/H EFFLUENT TREATMENT FACILITY AT THE SAVANNAH

PUBLISH
DATE
ABSTRACT

1987. 8 p.
87/00/00
The F/H effluent treatment facility will treat dilute
streams currently diverted to seepage basins at the
River Plant. In November 1988, the seepage basins are
to be retired and the facility will process the streams
remove toxic and radioactive species before they reach
environment.

KEYWORDS
LOCATION
REFERENCE

CHEMISTRY:

AUTHOR
TYPE
ORGANIZATION
TITLE

Inoue, Y.; Yamazaki, H. (Tohoku Univ., Sendai, Japan
Engineering)
acad

PUBLISH
DATE
ABSTRACT

ION-EXCHANGE PROPERTY AND THERMAL STABILITY OF HYDRO
OXIDE ION EXCHANGERS.

J. Nucl. Sci. Technol. Tokyo. June 1987. V.24(6) P.4
87/06/00

Ion-exchange property and thermal stability were studied
synthetic hydrous metal oxides from the viewpoint of
applicability for the processing of liquid radioactive
CHEMISTRY: reprocessing.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Runnells, D.D.; Lindberg, R.D.; Kempton, J.H. (Univ.
Boulder).

Bates, J.K.; Seefeldt, W.B. (eds.).
acad

PUBLISH

Argonne National Lab. IL (USA).
IRREVERSIBILITY OF SE(VI)/SE(IV) REDOX COUPLE IN SYN
BASALTIC GROUNDWATER AT 250C AND 750C.

DATE
ABSTRACT

P. 723-733. Scientific Basis for Nuclear Waste Management
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00

Synthetic basaltic ground water was spiked with different
of high-purity sodium selenate and sodium selenite,
ratios of aqueous SeO₄²⁻ to SeO₃²⁻ from 2100/1 to 1/
temperatures of 250C and 750C.

KEYWORDS
LOCATION
REFERENCE

CHEMISTRY: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Vance, E.R.; Gascoyne, M.
govt
Atomic Energy of Canada Limited
ISOTOPIC DISEQUILIBRIUM EFFECTS IN LEACHING OF NATURAL

PUBLISH	AND THORIANITE.
DATE	Reprinted from Chemical Geology (1986) 55:361-373.
ABSTRACT	86/00/00
KEYWORDS	CHEMISTRY: leaching.
LOCATION	
REFERENCE	
AUTHOR	Brodda, B.G.; Merz, E.R. (Kerforschungsanlage Juelic Germany, F.R. Inst. fuer Chemische Technolgie der Nu Entsorgung)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	LEACHABILITY OF ACTINIDES AND FISSION PRODUCTS FROM FUEL. (CS, SB, EU, ZR, RU, NP, PU, CU).
PUBLISH	P. 51. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	CHEMISTRY: leaching.
LOCATION	
REFERENCE	
AUTHOR	Kalin, M.
TYPE	acad/govt
ORGANIZATION	University of Toronto. (Canada).
TITLE	LONG-TERM ECOLOGICAL BEHAVIOUR OF ABANDONED URANIUM 2. GROWTH PATTERNS OF INDIGENOUS VEGETATION ON TER SEMI-AQUATIC AREAS.(EPS 3/HA/2).
PUBLISH	Ottawa. 1984. 98 p.
DATE	84/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: ecological impacts.
LOCATION	
REFERENCE	
AUTHOR	Crowe, M.C.; Greedan, J.E.; Garrett, J.D.; Burke, N. E.R.; George, I.M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	MELT-GROWN SHENE (CATISIO5) CRYSTALS.
PUBLISH	2 p. (1986). Reprinted from Journal of Materials Sci (1986) 5:979-980.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Finnegan, D.L.; Bryant, E.A.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	METHODS FOR OBTAINING SORPTION DATA FROM URANIUM-SER DISEQUILIBRIA.
PUBLISH	December 1987. 22 p.
DATE	87/12/00
ABSTRACT	Two possible methods have been identified for obtain retardation factors from measurements of uranium-ser disequilibria at Yucca Mountain. The first method wo

of the enhanced $^{234}\text{U}/^{238}\text{U}$ ratio in groundwater to determine a signature for exchangeable uranium sorbed on the rock.

KEYWORDS	exchangeable uranium would be leached and assayed. The method would use the ratio of ^{222}Rn to ^{234}U in solution, corrected for weathering, to infer the retardation of uranium. Similar methods could be applied to theoretical radium.
LOCATION	CHEMISTRY: groundwater.
REFERENCE	
AUTHOR	Kim, J.I.; Buckau, G.; Klenze, R. (Technische Univ. Garching, Germany. F.R.G., Inst. fuer Radiochemie); CEC (CEC); Capman, N.B. (BGS).
TYPE	
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	NATURAL COLLOIDS AND GENERATION OF ACTINIDE PSEUDOCOLLOIDS IN GROUNDWATER.
PUBLISH	P. 289-299. Natural Analogues in Radioactive Waste Management. Proceedings of a Symposium Organized by the CEC and the EC, Brussels, BE, on 28-30 April 1987. London. Graham and Trotter, 1987. 506 p. Radioactive Waste Management Series. 87/04/00
DATE	
ABSTRACT	Natural colloids in the Gorleben aquifer systems have been investigated as for their chemical composition, quantity and size distribution.
KEYWORDS	CHEMISTRY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Sheard, J.W.; Swanson, S.; Godwin, B.C.
TYPE	govt
ORGANIZATION	Saskatchewan Research Council.; University of Saskatchewan (Canada).
TITLE	NATURAL URANIUM SERIES RADIONUCLIDES IN THE UPLAND AND NORTHERN SASKATCHEWAN AND ADJACENT NORTHWEST TERRITORIES.
PUBLISH	SRC Technical Report no. 217. 1988.
DATE	88/00/00
ABSTRACT	The purpose of this study was to obtain extensive data on baseline concentrations of uranium series radionuclides in the vegetation of northern Saskatchewan and adjacent Northwest Territories.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	NFW 2.2-41-1
AUTHOR	Walker, J.R.; Leneveu, D.M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	NONLINEAR CHEMICAL SORPTION ISOTHERMS IN THE ASSESSMENT OF NUCLEAR FUEL WASTE DISPOSAL.
PUBLISH	1987. 48 p.
DATE	87/00/00
ABSTRACT	

KEYWORDS
LOCATION
REFERENCE

CHEMISTRY:

AUTHOR
TYPE
ORGANIZATION
TITLE

Wilkins, J.D.
govt
UKAEA Atomic Energy Research Establishment, Harwell.
NOTES ON 'NEAR FIELD CHEMISTRY OF RADIOACTIVE WASTE
MEETING HELD AT HARWELL ON 26TH/27TH FEBRUARY 1986.

PUBLISH
DATE
ABSTRACT

Mar 1987. 13 p.
87/03/00
The report summarises presentations made at a semina
Field Chemistry of Radioactive Waste Disposal". An e
bibliography is included.
CHEMISTRY: waste management.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Sunder, S.; Shoesmith, D.W.; Johnson, L.H.; Wallace,
Bailey, M.G.; Snaglewski, A.P. (Atomic Energy of Can
Pinawa, Manitoba).
Bates, J.K.; Seefeldt, W.B. (eds.).

TYPE
ORGANIZATION
TITLE

govt
Argonne National Lab. Il (USA).
OXIDATION OF CANDU FUEL BY THE PRODUCTS OF THE ALPHA
OF GROUNDWATER.

PUBLISH

P. 103-113. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00

DATE
ABSTRACT

The oxidation of CANDU fuel by the products of alpha
of water is being investigated using x-ray photoelec
spectroscopy and electrochemical techniques.
CHEMISTRY: groundwater.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Shoesmith, D.W.; Sunder, S.; Johnson, L.H.; Bailey,
govt
Atomic Energy of Canada Limited.
OXIDATION OF CANDU UO2 FUEL BY ALPHA-RADIOLYSIS PROD
WATER.

PUBLISH

8 p. (1985). Reprinted from Materials Research Socie
Proceedings 50, Scientific Basis for Nuclear Waste M
IX, p. 309-316, 1985.
85/00/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

CHEMISTRY:

AUTHOR

Pusch, R. (Swedish Geological Co., Lund).
Bates, J.K.; Seefeldt, W.B. (eds.).

TYPE
ORGANIZATION
TITLE

Argonne National Lab. Il (USA).
PERMANENT CRYSTAL LATTICE CONTRACTION, A PRIMARY MEC
THERMALLY INDUCED ALTERATION OF NA BENTONITE.
P. 791-802. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19

PUBLISH

DATE	87/00/00
ABSTRACT	The basic process in thermal transformation of smect hydrous mica is generally thought to be a lattice cl caused by partial replacement of tetrahedral silica
KEYWORDS	CHEMISTRY: thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Aubert, B.
TYPE	
ORGANIZATION	Societe Generale pour les Techniques Nouvelles, St.-Quetin-en-Yvelines, (France).
TITLE	PREPARATION PROCESS OF A BOROSILICATE GLASS CONTAINI WASTES. (in French)
PUBLISH	9 October 1987; 8 April 1986. 25 p.
DATE	87/10/09
ABSTRACT	An inactive borosilicate matrix is prepared by mixir oxide gel a concentrated aqueous solution of a boror and a solution of vitrifying agent. To obtain a c solution which is heat treated, nuclear wastes are a borosilicate glass containing the wastes is obtained
KEYWORDS	CHEMISTRY: glass, containment.
LOCATION	
REFERENCE	
AUTHOR	Laske, D. (Zurich, Switzerland); Doehring, L. (Hette Switzerland)
TYPE	
ORGANIZATION	Gesellschaft zur Foerderung der Industrieorientierten den Schweiz. Hochschulen und Weiteren Institutionen, (Switzerland).
TITLE	PROCEDURE FOR IMPROVEMENT OF THE STABILITY OF SOLIDI RADIOACTIVE ION-EXCHANGE RESIN PARTICLES. (in German)
PUBLISH	31 March 1988; 12 Novemeber 1984. 7 p.
DATE	88/03/31
ABSTRACT	Shrinkage of the resin particles can be accelerated treatment. The resulting matrix containing the treat ion-exchange resin particles has improved resistance which is retained even following dry out and subsequ immersion.
KEYWORDS	CHEMISTRY: thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Hayward, P.J.; Tait, J.C.; George, I.M.; Carmichael, J.P.M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	PROGRESS IN DEVELOPMENT OF A SOURCE TERM FOR SPHENE DISSOLUTION UNDER VAULT CONDITIONS.
PUBLISH	7 p. (1986). Reprinted from Advances in Ceramics 20: Waste Management II, p. 241-247, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: glass.
LOCATION	
REFERENCE	
AUTHOR	Saunders, P.A.H. (UKAEA Atomic Energy Research Estab Harwell); Wilkins, J.D. (UKAEA Atomic Energy Researc Establishment, Harwell).

TYPE	CHMBA
ORGANIZATION	
TITLE	RADIOACTIVE WASTE DISPOSAL: CHEMICAL CONTROL.
PUBLISH	Chem. Br. (May 1987). V. 23(5) P. 448-452, 458.
DATE	87/05/00
ABSTRACT	Recent work at Harwell and elsewhere has shown that in the immediate surroundings of radioactive waste c an important barrier to migration and a large degree protection.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Kim, J.I.; Lierse, C.; Beppelmann, K.; Magirius, S. Radiochemie, Garching, West Germany).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il (USA).
PUBLISH	RADIOLYTICALLY INDUCED OXIDATION REACTIONS OF ACTINI CONCENTRATED SALT SOLUTIONS.
DATE	P. 603-612. Scientific Basis for Nuclear Waste Manag
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 19 87/00/00
KEYWORDS	The autoradiolytic oxidation of Pu (IV) and Am (III) investigated in saline solution of different NaCl concentrations, pH and specific alpha-activities.
LOCATION	CHEMISTRY: salt.
REFERENCE	
AUTHOR	Bidoglio, G.; Tanet, G.; Plano, A. de; Lazzari, G.P. of the European Communities, Ispra (Italy). Joint R Centre).
TYPE	assoc
ORGANIZATION	JRNCD
TITLE	RADIONUCLIDE CHEMICAL SPECIES DETERMINATION IN WASTE STUDIES.
PUBLISH	J. Radioanal. Nucl. Chem. - Articles. (Mar 1987) 110
DATE	87/03/00
ABSTRACT	The bio-geochemical processes of actinides potential to the environment from nuclear waste deposits are m determined by their chemical form.
KEYWORDS	CHEMISTRY: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Hermens, R.A.; Kendall, J.B.; Partridge, J.A.
TYPE	
ORGANIZATION	
TITLE	RECOVERY OF URANIUM FROM SOLUTIONS.
PUBLISH	26 May 1987. VP.
DATE	87/05/26
ABSTRACT	A process is described of separating uranium from a solution derived from the ammonium diuranate process converting UF/sub 6/ to UO/sub 2/ and containing U(V ion, and ammonium ion, which comprises adding sodium hydrosulfite to the solution and recovering a precip containing fluorine, sodium, ammonium and U(IV).
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Lanza, F.; Parnisari, E. (Commission of the European
TYPE	Ispira, Italy. Joint Research Centre)
ORGANIZATION	assoc
	Technische Univ. Muenchen, Garching, Germany, F.R. G.
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	RELEASE AND DIFFUSION IN CLAY OF ELEMENTS LEACHED FROM
	BOROSILICATE GLASS.
PUBLISH	P. 52. Chemistry and Migration Behavior of Actinides
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	CHEMISTRY: leaching.
LOCATION	
REFERENCE	

AUTHOR	Vandergraaf, T.T.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	REVIEW OF THE ROLE OF NUCLEAR ANALYTICAL CHEMISTRY IN
	CANADIAN NUCLEAR FUEL WASTE MANAGEMENT PROGRAM.
PUBLISH	11 p. (1987). Reprinted from Journal of Radioanalytical
	Nuclear Chemistry (1986) 110(1):79-89.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY:
LOCATION	

REFERENCE

AUTHOR	Vandergraaf, T.T. (Atomic Energy of Canada Ltd., Pin
	Manitoba. Whiteshell Nuclear Research Establishment)
TYPE	govt
ORGANIZATION	JRNCD.
TITLE	REVIEW OF THE ROLE OF NUCLEAR ANALYTICAL CHEMISTRY IN
	CANADIAN NUCLEAR FUEL WASTE MANAGEMENT PROGRAM.
PUBLISH	J. Radioanal. Nucl. Chem. - Articles (Mar 1987) 110(1)
DATE	87/03/00
ABSTRACT	The Canadian Nuclear Fuel Waste Management Program is
	multifaceted and requires data from a large number of
	disciplines, such as geology, geochemistry, hydrogeology
	and mining engineering, chemistry, solid state science,
	environmental science, and meteorology. Examples of
	application of nuclear analytical chemistry, including
	radiochemical separation and instrumental neutron activation
	analysis are discussed.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Carnahan, C.L. (Lawrence Berkeley Lab., CA).
	Bates, J.K.; Seefeldt, W.B. (eds.).
TYPE	priv
ORGANIZATION	Argonne National Lab. Ill (USA).
TITLE	SIMULATION OF URANIUM TRANSPORT WITH VARIABLE TEMPERATURE
	OXIDATION POTENTIAL: THE COMPUTER PROGRAM THCC.
PUBLISH	P. 713-721. Scientific Basis for Nuclear Waste Management
	Pittsburgh, PA (USA). Materials Research Society. 1987.
DATE	87/00/00
ABSTRACT	A simulator of reactive chemical transport has been
	with the capabilities of treating variable temperature

KEYWORDS
LOCATION
REFERENCE

variable oxidation potentials within a single simulation. Examples illustrate how inclusion of variable temperature oxidation potential in numerical simulators can enhance understanding of the chemical mechanisms affecting multivalent waste elements.

CHEMISTRY: analytical techniques.

AUTHOR
TYPE
ORGANIZATION
TITLE

Delegard, C.H. (Rockwell Hanford Operations, Richlan
priv
RAACA.

PUBLISH
DATE
ABSTRACT

SOLUBILITY OF PUO₂.XH₂O IN ALKALINE HANFORD HIGH-LEV
SOLUTION.

Radiochim. Acta. (1987). V. 41(1) p. 11-21.
87/00/00

The solubility of Pu(IV) hydrous oxide, $\text{PuO}_2 \cdot x\text{H}_2\text{O}$ in air-equilibrated synthetic Hanford high-level waste was determined as a function of NaOH , $\text{NaAl}(\text{OH})_4$, NaN

KEYWORDS
LOCATION
REFERENCE

and Na_2CO_3 concentrations. The solubility was found with the square of the NaOH chemical activity.

CHEMISTRY:

AUTHOR

TYPE

ORGANIZATION

Pollard, P.M.; McMillan, J.W.; Phillips, G.; Thomaso
Ewart, F.T. (UKAEA Atomic Energy Research Establishm
Harwell); Liezers, M. (Manchester Univ, UK)
acad/assoc

TITLE

Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communities,
(Belgium).

PUBLISH

SOME ACTINIDE SPECIATION USING LASER INDUCED PHOTOAC
SPECTROSCOPY.

DATE
ABSTRACT

P. 64. Chemistry and Migration Behavior of Actinides
Products in the Geosphere. Abstracts. 1987. 196 p.
87/00/00

KEYWORDS
LOCATION
REFERENCE

Published in summary form only.
CHEMISTRY: waste characterization.

AUTHOR
TYPE
ORGANIZATION
TITLE

Hall, A.R. (UKAEA Atomic Energy Research Establishme
Chemistry Div.) (ed.)
assoc

PUBLISH

Commission of the European Communities, Brussels, (B
STUDIES OF SURFACE MORPHOLOGY AND CHEMICAL COMPOSITI
SUB-SURFACE REGIONS.

DATE
ABSTRACT

P. 68-172. Testing and Evaluation of Solidified High Radioactive Waste. London, UK. Graham and Trotman Ltd. Radioactive Waste Management Series.
87/00/00

The aim of the research work at the HMI is to produce and calculate the activity release from waste products under attack of salt solutions such as sodium chloride and brines. The programme comprises the investigation of simulated inactive and highly radioactive wastes.

KEYWORDS
LOCATION
REFERENCE

CHEMISTRY: salt, geology.

AUTHOR	Schreiber, H.D.; Kozak, S.J.; Leonhard, P.G.; McManu
TYPE	(Virginia Military Inst., Lexington. Center for Glas
ORGANIZATION	
TITLE	SULFUR CHEMISTRY IN A BOROSILICATE MELT. PT. 1. REDC
PUBLISH	AND SOLUBILITY.
DATE	Glastech. Ber. 1987. V.60(12) p.389-398.
ABSTRACT	87/00/00
	The solubility and redox state of sulfur have been d
	an alkali borosilicate melt representative of those

KEYWORDS	compositions under consideration for nuclear waste
LOCATION	immobilization.
REFERENCE	CHEMISTRY: glass.

AUTHOR	Righetto, L.; Marcandalli, B.; Bellobono, I.R. (Mila
TYPE	Italy); Bidoglio, G. (Commission of the European Com
ORGANIZATION	Ispra, Italy)
	acad/assoc
	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	SURFACE INTERACTIONS OF ACTINIDES WITH INORGANIC COL
PUBLISH	P. 109. Chemistry and Migration Behavior of Actinide
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	

AUTHOR	Pring, A.
TYPE	acad
ORGANIZATION	Cambridge Univ. (UK) Thesis (Ph.D.).
TITLE	THE CRYSTAL CHEMISTRY OF SOME BARIUM AND CAESIUM OXI
	APPLICATION IN RADWASTE DISPOSAL.
PUBLISH	1987. 210 p.
DATE	87/00/00
ABSTRACT	The problem of the disposal of radioactive waste pro
	the recycling of nuclear fuel is introduced and the
	problems associated with the immobilization of radio
	caesium and strontium are discussed.
KEYWORDS	CHEMISTRY: reprocessing.
LOCATION	
REFERENCE	

AUTHOR	Ewart, F.T.; McMillan, J.W.; Thomason, H.P. (UKAEA H
	Chemistry Div.); Liezers, M.; Pollard, P.M. (Manches
TYPE	UK. Inst. of Science and Technology)
ORGANIZATION	acad
	United Kingdom Nirex, Ltd.; UKAEA Harwell Lab. Chemi
	Department of the Environment, London, (UK).
TITLE	THE DEVELOPMENT OF A LASER-INDUCED PHOTOACOUSTIC FAC
	ACTINIDE SPECIATION.
PUBLISH	February 1988. 55 p.
DATE	88/02/00
ABSTRACT	A laser induced photoacoustic spectroscopy facility
	developed at Harwell to measure actinide species in
	with the minimal disturbance of the species equilibr
KEYWORDS	CHEMISTRY: radionuclide migration.

LOCATION

REFERENCE

AUTHOR	Harvey, K.B.; Boase, C.A.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE DISSOLUTION OF A GLASS HAVING AN ADHERENT INSOLU LAYER.
PUBLISH	10 p. (1986). Reprinted from Advances in Ceramics 20 Waste Management II, p. 495-504, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: dissolution, glass.
LOCATION	
REFERENCE	

AUTHOR	Harvey, K.B.; Boase, C.A.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE DISSOLUTION OF A SIMPLE GLASS. PART 2. BEHAVIOUR GLASS/WATER SYSTEMS.
PUBLISH	6 p. (1987). Reprinted from Physics and Chemistry of (1987) 28(1):11-16.
DATE	87/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: glass, dissolution.
LOCATION	
REFERENCE	

AUTHOR	Garisto, N.C.; Garisto, F.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE DISSOLUTION OF UO2: A THERMODYNAMIC APPROACH.
PUBLISH	9 p. (1986). Reprinted from Nuclear and Chemical Was (1986) 6:203-211.
DATE	86/00/00
ABSTRACT	
KEYWORDS	CHEMISTRY: thermodynamics, dissolution.
LOCATION	
REFERENCE	

AUTHOR	Beaven, G.W.; Bodsworth, K.; Cross, J.E.; Hooper, E. M.
TYPE	priv/govt
ORGANIZATION	UKAEA Harwell Lab. Chemistry Div.; Department of the London (UK).
TITLE	THE EFFECT OF EDTA AND CITRATE ON ALPHA DECONTAMINAT PROCESSES.
PUBLISH	July 1987. 49 p.
DATE	87/07/00
ABSTRACT	The results of a study investigating the effect of t complexants EDTA and Citrate on the actinide deconta achieved by precipitation and ultrafiltration treatm

KEYWORDS	processes are presented.
LOCATION	CHEMISTRY:
REFERENCE	
AUTHOR	Burnway, S.G.; Johnson, D.I.; Philips, D.C.; Brownsw
TYPE	govt
ORGANIZATION	Ukaea Harwell Lab. (UK).
TITLE	THE EFFECTS OF GAMMA IRRADIATION ON LEACHING OF 137C
PUBLISH	ORGANIC MATRIX WASTEFORMS.
DATE	Sept. 987. 29 p.
ABSTRACT	87/09/00
KEYWORDS	The effects of gamma irradiation on the leaching beh
LOCATION	137CS in organic matrix wasteforms has been studied.
REFERENCE	CHEMISTRY: radionuclide migration.
AUTHOR	Kaczvinsky, J.R. Jr.; Friz, J.S. (Iowa State Univ. c
TYPE	Tech., Ames, USA. Dept. of Chemistry); Walker, D.D.;
ORGANIZATION	(Savannah River Ecology Lab., Aiken, SC)
TITLE	govt/acad
PUBLISH	THE EFFECTS OF REACTION CONDITIONS ON POROUS CHELATI
DATE	DESIGNED FOR THE DECONTAMINATION OF NUCLEAR WASTE.
ABSTRACT	J. Radioanal. Nucl. Chem. - Articles. November 1987.
KEYWORDS	P.63-75.
LOCATION	87/11/00
REFERENCE	The effect of a number of synthetic variables on the
	of resorcinol-formaldehyde-iminodiacetic acid resins
	and 90Sr was determined.
	CHEMISTRY:
AUTHOR	Newton, T.W.; Hobart, D.E.; Palmer, P.D.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	THE FORMATION OF PU(IV)-COLLOID BY THE ALPHA-REDUCTI
PUBLISH	OR PU(VI) IN AQUEOUS SOLUTIONS.
DATE	1987. 23 P.
ABSTRACT	87/00/00
KEYWORDS	The effects of alpha-particle self-irradiation have
LOCATION	investigated in solutions of 239pu in the pH range f
REFERENCE	2.2. The initial solutions contained PU(IV), PU(V),
	PU(VI) or varios mixtures of these composition versu
	determined for periods up to 618 days.
	CHEMISTRY:
AUTHOR	Oscarson, D.W.; Watson, R.L.; Miller, H.G.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE INTERACTION OF TRACE LEVELS OF CESIUM WITH MONTM
PUBLISH	AND ILLITIC CLAYS.
DATE	11 p. (1987). Reprinted from Applied Clay Science (1
ABSTRACT	87/00/00

KEYWORDS
LOCATION
REFERENCE

CHEMISTRY:

AUTHOR
TYPE
ORGANIZATION

Bruno, J.; Casa, I.; Puigdomenech, I. (Royal Inst. o
Stockholm, Sweden)
acad
Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communities,
(Belgium).

TITLE
PUBLISH

THE KINETICS OF UO₂(S) DISSOLUTION UNDER REDUCING CO
P. 78-79. Chemistry and Migration Behavior of Actini
Fission Products in the Geosphere. Abstracts. 1987.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

87/00/00
Published in summary form only.
CHEMISTRY:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

acad
THE SOLUBILITY OF ACTINIDES IN THE NEAR FIELD.
Nuclear Waste Management Symposium. Stockholm (Swede
9-11, 1985. p. 701.
85/09/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

CHEMISTRY:

AUTHOR
TYPE
ORGANIZATION

Meyer, R.E.; Arnold, W.D.; Case, F.I.
govt
Oak Ridge National Lab. TN (USA).; Nuclear Regulator
Washington DC (USA).

TITLE
PUBLISH
DATE
ABSTRACT

THE SOLUBILITY OF ELECTRODEPOSITED TC(IV) OXIDES.
July 1987. 20 P.
87/07/00
Solubilities of electrodeposited TC(IV) oxides have
determined in solutions of NaCl, Hcl, and synthetic
in the pH range 0 - 10. The results are described.
CHEMISTRY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Morgan, R.D.; Pryke, D.C.; Rees, J.H.

TITLE

UKAEA Harwell Lab. Chemistry Div.; Department of the
London (UK).

PUBLISH
DATE
ABSTRACT

THE SORPTION OF ACTINIDES ON CANDIDATE MATERIALS FOR
REPOSITORIES.

November 1987. 33 p.

87/11/00

The sorptive behavior of the actinides uranium, nept
plutonium and americium has been investigated under
air-saturated conditions on a number of candidate ne
materials by batch sorption experiments.

CHEMISTRY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Lorenzini, E.; Spiga, M.; Corticelli, M.A. (Bologna U
acad

PUBLISH
DATE
ABSTRACT

THERMAL ANALYSIS OF THE HEAT EXCHANGER FOR A SPENT N
STORAGE POOL.
Ann. Nucl. Energy. 1987. V.14(9) P. 499-503.
87/00/00

KEYWORDS
LOCATION
REFERENCE

A numerical solution is provided to predict the tran
temperature distribution of both fluids in the u-tub
exchanger of a spent nuclear fuel storage fuel.
CHEMISTRY: thermodynamics.

AUTHOR
TYPE
ORGANIZATION
TITLE

Grantham, L.F.

PUBLISH
DATE
ABSTRACT

THERMAL CONVERSION OF WASTES.
26 May 1987. VP.
87/05/26

KEYWORDS
LOCATION
REFERENCE

A process is described for the thermal conversion of
radioactive waste material.
CHEMISTRY: thermodynamics.

AUTHOR
TYPE
ORGANIZATION
TITLE

Rard, J.A.
govt

PUBLISH
DATE
ABSTRACT

Lawrence Livermore National Lab. CA (USA).
THERMODYNAMIC DATA BASES FOR MULTIVALENT ELEMENTS: A
RUTHENIUM.
November 1987. 29 p.
87/11/00

Potential pH diagrams of the predominance regions ch
significantly with concentration due to
polymerization/depolymerization reactions. Failure t

KEYWORDS
LOCATION
REFERENCE

the known chemistry of ruthenium can yield large dif
predicted solubilities.
CHEMISTRY:

AUTHOR
TYPE
ORGANIZATION

Silva, R.J. (Lawrence Livermore National Lab., CA)
govt
Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communities,
(Belgium).

TITLE

THERMODYNAMICS OF HYDROLYSIS AND CARBONATE COMPLEXAT
OF THE TRANSURANIUM ELEMENTS.

PUBLISH

P. 106. Chemistry and Migration Behavior of Actinide
Products in the Geosphere. Abstracts. 1987. 196 p.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

87/00/00
Published in summary form only.
CHEMISTRY: thermodynamics.

AUTHOR
TYPE
ORGANIZATION
TITLE

acad

TRANSPORT OF CHEMICALS IN THE GROUNDWATER SYSTEM AT

PUBLISH	WELDON SPRING, MISSOURI.
DATE	Colorado State University. 8TH Geohydro Waste Mgt. S
ABSTRACT	(USA). Feb. 5-7, 1986. p. 457-467.
KEYWORDS	86/02/00
LOCATION	CHEMISTRY: groundwater, transport.
REFERENCE	
AUTHOR	Dejonghe, P.; Blommaert, W.; Van de Voorde, N.
TYPE	acad
ORGANIZATION	
TITLE	TREATMENT AND CONDITIONING OF AQUEOUS EFFLUENTS FROM
PUBLISH	OPTIMIZATION IN VOLUME REDUCTION AND INSOLUBILIZATIO
DATE	Waste Management '87: Waste Isolation in the US, Tec
ABSTRACT	Programs and Public Education. Tucson, AZ, (USA). Un
KEYWORDS	Arizona Nuclear Engineering Dept. 1987. p. 125-128.
LOCATION	87/00/00
REFERENCE	Evaporator bottoms resulting from the treatment of a
	effluents from PWR's and BWR's can be treated by che
	and the resulting sludges can be further conditioned
	cementation, bituminization or high temperature slag
	CHEMISTRY: reprocessing.
AUTHOR	Ballereau, P.
TYPE	
ORGANIZATION	CEA Centre D'Etudes de Bruyeres-le-Chatel, 91, (Franc
TITLE	TRITIUM CONVERSION IN TRITIATED WATER: STUDY OF THE
PUBLISH	REACTIONS: A LITERATURE SURVEY. (in French)
DATE	October 1987. 115 p.
ABSTRACT	87/10/00
KEYWORDS	According to ICRP Publication 30, hazards due to mol
LOCATION	tritium are not significant in comparison to hazards
REFERENCE	oxidated form: tritiated water.
	CHEMISTRY:
AUTHOR	Togerson, D.F.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	UNDERLYING CHEMISTRY RESEARCH FOR THE NUCLEAR FUEL W
PUBLISH	MANAGEMENT PROGRAM.
DATE	AECL - 7786.
ABSTRACT	84/00/00
KEYWORDS	CHEMISTRY:
LOCATION	
REFERENCE	
AUTHOR	Hinsch, H.; Kallmerten, W. (Gesellschaft fuer Strahl
TYPE	Umweltforschung M.B.H. Muenchen, Braunschweig, Germa
ORGANIZATION	Inst. fuer Tieflagerung).
TITLE	Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt
PUBLISH	Gesellschaft E.V., Bonn, Germany, (F.R.).
	URANIUM AND CESIUM LEACHING FROM LARGE SAMPLES IN TH
	(in German)
	P. 441-444. Annual Meeting on Nuclear Technology '87

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Proceedings. Session 4: Fuel Cycle and Waste Process
829 p.
87/00/00

CHEMISTRY: leaching.

AUTHOR
TYPE
ORGANIZATION
TITLE

Chambre, P.L.; Kang, C.H.; Lee, W.W.L.; Pigford, T.F.

Lawrence Berkely Lab. CA (USA).
WASTE DISSOLUTION WITH CHEMICAL REACTION, DIFFUSION
ADVECTION.

PUBLISH
DATE
ABSTRACT

June 1987. 7 p.
87/06/00

This paper extends the mass-transfer analysis to include the effect of advective transport in predicting the steady-state dissolution rate, with a chemical-reaction-rate boundary

KEYWORDS
LOCATION
REFERENCE

condition at the surface of a waste form of arbitrary geometry.
CHEMISTRY: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Heiken, J.H., (ed.).
govt

Los Alamos National Lab. NM (USA).
WORKSHOP ON FUNDAMENTAL GEOCHEMISTRY NEEDS FOR NUCLEAR
ISOLATION.

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

1985. 197 p.
85/00/00

CHEMISTRY: containment.

AUTHOR	Yeh, G.T.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. NM (USA).
TITLE	3DFEMWATER: A THREE-DIMENSIONAL FINITE ELEMENT MODEL FLOW THROUGH SATURATED-UNSATURATED MEDIA.
PUBLISH	Aug. 1987. 317 p.
DATE	87/08/00
ABSTRACT	The 3DFEMWATER model is designed to treat heterogene anisotropic media consisting of as many geologic for desired. The model is verified with analytical solut other numerical models for three examples.
KEYWORDS	GEOLOGY: modelling.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	A COMPARATIVE STUDY OF CLAY-TYPE GROUTING MATERIALS.
PUBLISH	1984. 39 p.
DATE	84/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: clay.
LOCATION	
REFERENCE	
AUTHOR	Li, L.S.; Sun, N.Z.; Yeh, W.W.G.; Lu, A.H.
TYPE	acad/priv
ORGANIZATION	California Univ., Los Angeles (USA); Rockwell Intern Corp., Richland, WA (USA).
TITLE	A COMPARATIVE STUDY OF SENSITIVITY COEFFICIENT CALCU METHODS IN GROUNDWATER FLOW.
PUBLISH	Jan 1987. 37 p.
DATE	87/01/00
ABSTRACT	Sensitivity coeffecients can be calculated by (1) th coefficient method, (2) the sensitivity equation met the variational method. These three methods are summ both steady and unsteady state flows in a two-dimens inhomogenous, confined aquifer.
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Taylor, S.R.; Molyaner, G.L.; Howard, K.W.F.; Kille
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	A COMPARISON OF FIELD AND LABORATORY METHODS FOR DET CONTAMINANT FLOW PARAMETERS.
PUBLISH	10 p. (1987). Reprinted from Ground Water (1987) 25(
DATE	87/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Bastian, R.J.; Voss, C.F.; Apted, M.J.; Shotwell, L.

TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	A COUPLED MECHANICAL-HYDROLOGICAL INVESTIGATION OF C ROCKS: ANNUAL TECHNICAL PROGRESS REPORT, PROPOSED TE AND PRELIMINARY RESULTS.
PUBLISH	February 1988. 62 p.
DATE	88/02/00
ABSTRACT	This report reviews the fracture flow behavior in ro being performed at the Pacific Northwest Lab. The st objective is to determine the feasibility of predict mechanical-hydrological behavior of natural rock fra accurately characterizing fracture surface topograph mineralization.
KEYWORDS	GEOLOGY: fractures, hydrology.
LOCATION	
REFERENCE	
AUTHOR	Tomasko, D.; Jensen, A.L.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	A LINEAR FLOW INTERPRETATION OF THE H-3 MULTIWELL PU CONDUCTED AT THE WASTE ISOLATION PILOT PLANT SITE.
PUBLISH	July 1987. 33 p.
DATE	87/07/00
ABSTRACT	Unlike previous interpretations of this test that us porosity radial flow model, this interpretation is b linear flow process. Several analytical techniques a in this paper on the titled subject.
KEYWORDS	GEOLOGY: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E. S.P.; Bauer, S.J.; Conley, C.H.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	A PROPOSED METHOD FOR PREDICTING ROCK-MASS DEFORMABI COMPLIANT JOINT MODEL.
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 691-698.
DATE	87/00/00
ABSTRACT	A method to predict the stess strain response of a f mass is presented.
KEYWORDS	GEOLOGY: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Hunter, R.L. (Sandia National Labs., Albuquerque, NM
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
TYPE	Chaturvedi, R.L. (ed.).
ORGANIZATION	govt
TITLE	New Mexico Health and Environment Dept., Santa Fe, (
PUBLISH	Environmental Evaluation Group.
DATE	A REGIONAL WATER BALANCE FOR THE WIPP SITE AND SURRO P. 58-70. The Rustler Formation at the WIPP Site: Re Workshop on the Geology and Hydrology of the Rustler as it Relates to the WIPP project. Febuary 1987.
ABSTRACT	87/02/00 A water balance or budget is developed as an account components of a closed hydrologic system. A general for a closed hydrologic system is presented.
KEYWORDS	GEOLOGY: hydrology.

LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION TITLE	Doughty, C.; Pruess, K. (Lawrence Berkeley Lab, CA) A SEMIANALYTICAL SOLUTION FOR HEAT-PIPE EFFECTS NEAR NUCLEAR WASTE PACKAGES BURIED IN PARTIALLY SATURATED MEDIA.
PUBLISH DATE ABSTRACT	Int. J. Heat Mass Transfer. Jan 1988. V. 31(1) P.79- 88/01/00 The emplacement of a strong heat source, such as a h nuclear waste package, in a partially saturated perm will give rise to the development of a heat pipe. Th paper analyzes a simplified version of this problem steady state solution, for radial geometry.
KEYWORDS LOCATION REFERENCE	GEOLOGY: thermodynamics.
AUTHOR TYPE ORGANIZATION TITLE	Ratigan, J.L. RE/SPEC, Inc., Rapid City, SD; Battelle Memorial Ins OH. Office of Nuclear Waste Isolation. A SENSITIVITY STUDY OF BRINE TRANSPORT INTO A BOREHO A COMMERCIAL HIGH-LEVEL WASTES CANISTER. (BRINE INCL THERMAL GRADIENT)
PUBLISH DATE ABSTRACT	February 1987. 82 p. 87/02/00 A set of coupled field evaluations is developed for brine in natural rock salt. Transport of brine inclu individual crystals is considered to be thermally dr whereas transport along crystal interfaces or grain is considered to be pressure driven.
KEYWORDS LOCATION REFERENCE	GEOLOGY: containment.
AUTHOR	Byers, C.D.; Jercinovic, M.J.; Ewing, R.C.
TYPE ORGANIZATION TITLE	govt/acad Argonne National Lab., IL; New Mexico Univ., Albuque Geology; Nuclear Regulatory Commission, Washington, of Nuclear Regulatory Research. A STUDY OF NATURAL GLASS ANALOGUES AS APPLIED TO ALT NUCLEAR WASTE GLASS.
PUBLISH DATE ABSTRACT	February 1987. 163 p. 87/02/00 A two-part study was undertaken on the alteration of basalt and nuclear waste glasses. In the first part, University of New Mexico characterized a wide variet basaltic glasses with respect to reaction products, kinetics, and geologic history.
KEYWORDS LOCATION REFERENCE	GEOLOGY: glass.
AUTHOR TYPE ORGANIZATION TITLE	Heinrich, W.F. govt Atomic Energy of Canada Limited. A TRANSFORMATION FOR PREDICTING MECHANICAL CHANGES R TIME-DEPENDENT MICROCRACKING IN PLUTONIC ROCK.

PUBLISH	1987. 12 p.
DATE	87/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: granite.
LOCATION	
REFERENCE	
AUTHOR	Roest, J.P
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	ACOUSTIC P-WAVE VELOCITY MEASUREMENTS OF CATACLASTIC ROCK SALT.
PUBLISH	1987. 51 p.
DATE	87/00/00
ABSTRACT	Model tests are carried out, in order to investigate cataclastic thermo-mechanical behaviour of rock salt simulated repository borehole.
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	Torstenfelt, B. (Chalmers Univ. of Tech., Goeteborg, Rundberg, R.C. (Los Alamos National Lab., NM)
TYPE	govt/acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R.; the European Communities, Brussels, (Belgium).
TITLE	ACTINIDE SORPTION OF GRANITES AND MINERALS AS A FUNC AND COLLOIDS/PSEUDOCOLLOIDS.
PUBLISH	P. 22-23. Chemistry and Migration Behavior of Actini Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	GEOLOGY: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Milton, G.M.; Brown, R.M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	ADSORPTION OF URANIUM FROM GROUNDWATER BY COMMON FRA SECONDARY MINERALS.
PUBLISH	8 p. (1987). Reprinted from Canadian Journal of Eart (1987) 24:1321-1328.
DATE	87/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Fisher, R.S. (Univ. of Texas, Austin).
TYPE	acad
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	AMOUNT AND NATURE OF OCCLUDED WATER IN BEDDED SALT, BASIN, TEXAS.
PUBLISH	Proceedings of Salt Repository Project's Workshop in Migration. March 1987, p. 7-8, Appendix/C.53-C.58.
DATE	87/03/00
ABSTRACT	The quantity and types of fluids within bedded salt the Permian San Andres formation were evaluated at t Bureau of Economic Geology. The amount of water that affected by a high-level nuclear waste repository ca

KEYWORDS
LOCATION
REFERENCE

estimated if the volume of halite, the volume of clay interlayers, and the amount and type of impurity in known.
GEOLOGY: salt, groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Jensen, E.J.
priv
Pacific Northwest Lab. WA (USA).
AN EVALUATION OF AQUIFER INTERCOMMUNICATION BETWEEN UNCONFINED AND RATTLESNAKE RIDGE AQUIFERS ON THE HAN
October 1987. 33 p.

PUBLISH
DATE
ABSTRACT

87/10/00
The hydraulic head data were used to determine the effect of water discharged to the ground from B pond on the water table of the unconfined aquifer and the potentiometric head of the confined aquifer.
GEOLOGY: hydrogeology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Klavetter, E.A.; Peters, R.R.
govt
Sandia National Lab. NM (USA);
AN EVALUATION OF THE USE OF MERCURY POROSIMETRY IN CHARACTERIZING HYDROLOGIC PROPERTIES OF TUFFS FROM YUCCA MOUNTAIN,
Mar 1987. 154 p.

PUBLISH
DATE
ABSTRACT

87/03/00
The geologic formations in the unsaturated zone at Yucca Mountain, on and adjacent to the Nevada test site (Nevada) are currently being studied for consideration as the host for a radioactive-waste repository.
GEOLOGY: tuff.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Melnyk, T.W.; Skeet, A.M.M.
govt
Atomic Energy of Canada Limited.
AN IMPROVED TECHNIQUE FOR THE DETERMINATION OF ROCK PERMEABILITY
7 p. (1986). Reprinted from Canadian Journal of Earth Sciences
(1986) 23:1068-1074.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

86/00/00
GEOLOGY: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Pickens, J.F.; Grisak, G.E.; Avis, J.D.; Belanger, D.
Technologies, Inc., Austin, TX)
priv

PUBLISH
DATE
ABSTRACT

ANALYSIS AND INTERPRETATION OF BOREHOLE HYDRAULIC TEST DATA
BOREHOLES: PRINCIPLES, MODEL DEVELOPMENT, AND APPLICATIONS
Water Resource Res. July 1987. V. 23(7). P. 1341-1374
87/07/00
A review of the literature on hydraulic testing and interpretation methods, particularly in low-permeability media, in the need for a comprehensive hydraulic testing interpretation capability.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: modelling.

AUTHOR
TYPE
ORGANIZATION
TITLE

govt

PUBLISH
DATE
ABSTRACT

ANALYSIS FOR PRELIMINARY EVALUATION OF DISCRETE FRAC
LARGE-SCALE PERMEABILITY IN SEDIMENTARY ROCKS.
ORNL Report 87-37733/1. May 1987. 54 p.
87/05/00

KEYWORDS
LOCATION
REFERENCE

GEOLOGY:

AUTHOR
TYPE
ORGANIZATION
TITLE

Zimmerman, R.; Bellman, R.A.; Mann, K.L.
govt

PUBLISH

Sandia National Lab. NM (USA).
ANALYSIS OF DRIFT CONVERGENCE PHENOMENA FROM G-TUNNE
MINING EVALUATIONS.
Rock Mechanics: Proceedings of the 28th US Symposium
1987. p. 831-832.

DATE
ABSTRACT

87/00/00
This paper discusses the results of vertical and hor
convergence measurements taken during the mining of
repository-sized drift in welded tuff in G-tunnel on
test site.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: geologic disposal.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

White, S.M.; Tien, C.L. (California Univ., Berkeley.
Mechanical Engineering)
acad

ANALYSIS OF FLOW CHANNELING NEAR THE WALL IN PACKED
Waerme- Stoffuebertrag. 27 July 1987. V. 21(5) P. 29
87/07/00

The phenomenon of flow channeling in packed beds is
A closed form solution is obtained from the volume a
second-order momentum equation with the no-slip cond
wall, using an exponential porosity distribution typ
packed beds.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E.
S.P.; Bauer, S.J.; Holland, J.F.

DATE
ABSTRACT

govt
Sandia National Lab. NM (USA).
ANALYSIS OF IN SITU STESS AT YUCCA MOUNTAIN.
Rock Mechanics: Proceedings of the 28th US Symposium
1987. p. 707-714.

87/00/00
A method has been developed utilizing far field fini
models such that the measured in situ stess state ap
reproduced well. The method and results are presente
paper.

KEYWORDS

GEOLOGY: analytical techniques.

LOCATION
REFERENCE

AUTHOR	Saulnier, G.J.Jr.
TYPE	priv/govt
ORGANIZATION	Intera Technologies, Inc., Austin, TX; Sandia Nation Albuquerque, NM (USA).
TITLE	ANALYSIS OF PUMPING TESTS OF THE CULEBRA DOLOMITE CO H-11 HYDROPAD AT THE WASTE ISOLATION PILOT PLANT SIT
PUBLISH	25 September 1987. 199 p.
DATE	87/09/25
ABSTRACT	The culebra dolomite member of the permian rustler f hydrologically evaluated in a series of pumping test at the H-11 hydropad at the WIPP site.
KEYWORDS	GEOLOGY: hydrology.
LOCATION	
REFERENCE	
AUTHOR	Monastersky, R.
TYPE	media
ORGANIZATION	
TITLE	ANOTHER CONTROVERSY OVER NUCLEAR WASTE SITE.
PUBLISH	Science News 134:294.
DATE	88/11/05
ABSTRACT	Geoscientists working for the State of Nevada are qu accuracy of federal studies looking at the geologic Yucca Mountain, Nevada - the proposed site for the n first high-level nuclear waste dump.
KEYWORDS	GEOLOGY: siting.
LOCATION	
REFERENCE	
AUTHOR	Asmis, H.W.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	ASPECTS OF SEISMIC MECHANISMS RELATED TO VAULT DESIG RECORD TR-228.
PUBLISH	
DATE	84/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: design.
LOCATION	
REFERENCE	
AUTHOR	Coyle, A.J.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	ASSE BRINE MIGRATION AND IN-SITU TESTING STATUS REPO
PUBLISH	Proceedings of Salt Repository Project's Workshop on Migration. March 1987, p.18
DATE	87/03/00
ABSTRACT	This presentation contains a status report of field conducted in salt mines. Included are ongoing tests salt mine in the Federal Republic of Germany and tes at Avery Island in the US.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: salt.

AUTHOR
TYPE
ORGANIZATION
TITLE

Newton, J.G.; Tanner, J.M.
priv
Lamoreaux (P.E.) and Associates, Inc., Tuscaloosa, A
ASSESSMENT OF SUBSIDENCE IN KARST TERRANES AT SELECT
EAST TENNESSEE AND COMPARISON WITH A CANDIDATE SITE
RIDGE, TENNESSEE: PHASE 2.

PUBLISH
DATE
ABSTRACT

September 1987. 103 p.
87/09/00
Work in respective areas included assessment of cond
related to sinkhole development. Information collect
assessed involved geology, hydrogeology, land use, l
and linear trends, identification of karst features
and inventory of historical sinkhole development and
GEOLOGY: siting.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Knauth, P.L. (Arizona State Univ.).
acad
Pacific Northwest Lab. WA (USA).
ASU TESTING OF WATER IN SALT.
Proceedings of Salt Repository Project's Workshop in
Migration. March 1987, p. 11-12, Appendix/C.101-C.10
87/03/00

DATE
ABSTRACT

Stable isotope measurements have been used to determ
origin of water leaking into salt mines in the Gulf
domes. Water "pockets" are found around the peripher
domes and in association with sediment inclusions.
GEOLOGY: groundwater, salt.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Linsalata, P.; Eisenbud, M. (New York Univ., USA); F
(Rio de Janeiro Univ., Brazil)
Come, B. (CEC); Chapman, N.A. (BGS).
acad
Commission of the European Communities, Luxembourg.
BIOGEOCHEMICAL STUDIES OF TE RA, U, TH AND REE DEPOS
DO FERRO: A QUANTITATIVE APPLICATION TO IMPROVE CONF
RADIONUCLIDE IMMOBILIZATION PROCESSES.

PUBLISH

P. 116-117. Natural Analogues in Radioactive Waste D
Proceedings of a symposium organized by the CEC and
Brussels. Graham & Trotman, 1987. 506 p. Radioactive
Management Series.

DATE
ABSTRACT

87/04/00
This paper presents the results of a study of the de
Brazil undertaken to show that geochemical barriers
prevent radionuclides leaving waste repositories.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: radionuclide migration.

AUTHOR

Coyle, A.J.; Eckert, J.; Kalia, H.

TYPE	acad
ORGANIZATION	Battelle Memorial Inst., Columbus, OH. Office of Nuc Isolation.
TITLE	BRINE MIGRATION TEST REPORT: ASSE SALT MINE, FEDERAL GERMANY: TECHNICAL REPORT.
PUBLISH	January 1987. 168 p.
DATE	87/01/00
ABSTRACT	This report presents a summary of brine migration te were undertaken at the Asse Mine of the FRG under a US/FRG agreement.
KEYWORDS	GEOLOGY: groundwater, salt.
LOCATION	
REFERENCE	
AUTHOR	Deal, D.E.; Case, J.B.
TYPE	priv
ORGANIZATION	Westinghouse Electric Corp., Carlsbad, NM (USA).
TITLE	BRINE SAMPLING AND EVALUATION PROGRAM: PHASE 1 REPOR
PUBLISH	15 June 1987. 172 p.
DATE	87/06/15
ABSTRACT	This interim report presents preliminary data obtain course of the WIPP brine sampling and evaluation pro investigations focus on the brine present in the nea environment around the WIPP underground workings.
KEYWORDS	GEOLOGY: salt, groundwater.
LOCATION	
REFERENCE	
AUTHOR	McTigue, D.F.; Nowak, E.J.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	BRINE TRANSPORT STUDIES IN THE BEDDED SALT OF THE WA PILOT PLANT (WIPP).
PUBLISH	1987. 10 p.
DATE	87/00/00
ABSTRACT	Brine flow has been measured to unheated boreholes f a few days and to heated holes for two years in the facility. It is suggested that Darcy flow may domina observed influx of brine.
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	Nimick, F.B.; Schwartz, B.M.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	BULK, THERMAL, AND MECHANICAL PROPERTIES OF THE TOPO
PUBLISH	MEMBER OF THE PAINTBRUSH TUFF, YUCCA MOUNTAIN, NEVAD
DATE	September 198. 253 p.
ABSTRACT	87/09/00 Experimental data on matrix porosity, grain density, expansion, compressive strength, Young's modulus, Po ratio, and axial strain at failure for samples from spring member of the paintbrush tuff are compiled.
KEYWORDS	GEOLOGY: tuff.
LOCATION	
REFERENCE	
AUTHOR	Bourke, P.J.
TYPE	assoc
ORGANIZATION	UKAEA Atomic Energy Research Establishment, Harwell.

TITLE	Div.
PUBLISH	CHANNELING OF FLOW THROUGH FRACTURES IN ROCK.
DATE	May 1987. 11 p.
ABSTRACT	87/05/00 A method of mapping the channelling of flow in rock formed by contacts between rock faces and of measuring effective apertures of channels has been developed.
KEYWORDS	GEOLOGY: fractures.
LOCATION	
REFERENCE	
AUTHOR	Coulon, H.; Lajudie, A.; Debrabant, P.; Arabek, R.; Andre-Jehan, R. (CNRS, Villeneuve d'Ascq, France).
TYPE	
ORGANIZATION	Argonne National Lab. 11 (USA).
TITLE	CHOICE OF FRENCH CLAY AS ENGINEERED BARRIER COMPONENT DISPOSAL.
PUBLISH	P. 813-824. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
DATE	
ABSTRACT	Results are presented of physical measurements on clay buffer materials for use in nuclear fuel waste disposal materials being considered as constituent elements of barriers are essentially calcium smectite clays, in swelling clays, coming from fourteen French deposits
KEYWORDS	GEOLOGY: clay.
LOCATION	
REFERENCE	
AUTHOR	Morner, Nils-Axel.
TYPE	acad
ORGANIZATION	
TITLE	COMMENTS ON THE SWEDISH FUELLING LICENCE DECISION.
PUBLISH	Bulletin of the INQUA Neotectonics Commission, No. 8, Stockholm, 1p.
DATE	85/00/00
ABSTRACT	The Swedish government issued fuelling licences for based on conclusions of the KBS-3 report that a safe geological disposal method for radioactive waste had demonstrated. This report holds that KBS ignored paleoneotectonic and structural data that would disprove concept.
KEYWORDS	GEOLOGY: geologic disposal.
LOCATION	Paleogeophysics and Geodynamics, University of Stockholm, Sweden
REFERENCE	anne
AUTHOR	Rancon, D. (CEA Centre D'Etudes Nucleaires de Cadarache, Durance, France.)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R.G. Radiochemie; Commission of the European Communities, (Belgium).
TITLE	COMPARATIVE STUDY ON THE BEHAVIOR OF RADIOIODINE IN ACCORDING TO VARIOUS EXPERIMENTAL AND NATURAL CONDITIONS
PUBLISH	P. 35. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	GEOLOGY:
LOCATION	

REFERENCE

AUTHOR Mercer, J.W.
 TYPE govt
 ORGANIZATION Sandia National Lab. NM (USA).
 TITLE COMPILATION OF HYDROLOGIC DATA FROM DRILLING THE SAL CASTILE FORMATIONS NEAR THE WASTE ISOLATION PILOT PL SOUTHEASTERN NEW MEXICO.
 PUBLISH January 1987. 36 p.
 DATE 87/01/00
 ABSTRACT This report compiles and evaluates data from tests p the Salado and Castile formations during site charac exclusive of the "Brine Reservoirs" in the Castile.
 KEYWORDS GEOLOGY: groundwater.
 LOCATION
 REFERENCE

AUTHOR Kojima, K.; Ohno, H. (Univ. of Tokyo).
 TYPE acad
 ORGANIZATION
 TITLE CONNECTION BETWEEN FARFIELD AND NEARFIELD IN RELATIO FRACTURES AND/OR FLOWPATHS FOR THE GEOLOGICAL ISOLAT RADIOACTIVE WASTES.
 PUBLISH P. 159-162. Proceedings of the 6th International Con Mechanics. Accord, MA (USA). A.A. Balkema Publishers
 DATE 87/00/00
 ABSTRACT The characteristics of fractures and hydrology are d for the radioactive wastes isolation in the mobile b
 KEYWORDS GEOLOGY: fractures, hydrology.

LOCATION REFERENCE

AUTHOR Echegaray, Rogelio; Sarudiansky, Roberto
 TYPE acad
 ORGANIZATION Consejo Superior Professional de Geologia (Argentina)
 TITLE CONSIDERACIONES ACERCA DEL EMPLAZAMIENTO DO UN REPOS NUCLEAR. (in Spanish).
 PUBLISH Buenos Aires, March, 1988, 4pp.
 DATE 88/03/09
 ABSTRACT The predominant society of geologists in Argentina i opinion that as of March 1987, the construction of t repository could not be justified on the basis of st already carried out. Chief concerns relate to eviden tectonic movement during the Quaternary period and i of seismic instability in the area.
 KEYWORDS GEOLOGY:

LOCATION
REFERENCE anne

AUTHOR Blasco, H. Corchuelo; Benitez, Alfredo Luis
 TYPE govt
 ORGANIZATION Senate of Argentina.
 TITLE CONSIDERATIONS IN SUPPORT OF A REQUEST FOR INFORMATI PLANS FOR A NUCLEAR REPOSITORY IN ARGENTINA
 PUBLISH October, 1988, 4pp.
 DATE 88/10/00
 ABSTRACT Considerations and background material submitted by of the National Senate requesting full information a Argentinian repository project. Evidence of recent movement in the Gastre area has been ignored by the proponents. Hydrogeological work that has been done

KEYWORDS	preliminary and needs further substantiation.
LOCATION	GEOLOGY: hydrogeology.
REFERENCE	anne
AUTHOR	Patijn, J. (Centre d'etude de L'energie Nucleaire, M
TYPE	acad
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	CONTRIBUTION TO HYDROGEOLOGICAL INVESTIGATIONS RELAT
	DISPOSAL OF RADIOACTIVE WASTES IN DEEP ARGILLACEOUS
	(in French)
PUBLISH	1987. 172 p.
DATE	87/00/00
ABSTRACT	The study deals with the development of a methodology
	evaluate the capability of an aquifer system to be u
	disposal of radioactive wastes in deep argillaceous
KEYWORDS	GEOLOGY: hydrogeology.
LOCATION	
REFERENCE	

AUTHOR	Niou, S.; Pietz, J.M.; Farmer, I.W.; Daemen, J.J.; D
TYPE	Glass, C.E.; Neumann, S.P.
ORGANIZATION	priv
TITLE	International Technology Corp. NM (USA).
	COUPLED BRINE MIGRATION AND STRESS ANALYSIS FOR REPO
	SATURATION IN BEDDED SALT.
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium
	1987. p. 601-608.
DATE	87/00/00
ABSTRACT	A preliminary analysis of brine migration into excav
	repositories at WIPP is described. The computer code
	results are described.
KEYWORDS	GEOLOGY: radionuclide migration.
LOCATION	
REFERENCE	

AUTHOR	Herbert, A.W.; Jackson, C.P.; Lever, D.A.
TYPE	
ORGANIZATION	UKAEA Harwell Lab. Theoretical Physics Div.; Departm
TITLE	Environment. London (UK).
	COUPLED GROUNDWATER FLOW AND SOLUTE TRANSPORT WITH F
	STRONGLY DEPENDANT UPON CONCENTRATION.
PUBLISH	August 1987. 46 p.
DATE	87/08/00
ABSTRACT	The governing equations are discussed for the flow o
	solution with significant density variations through
	medium.
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	

AUTHOR	Cosma, C. (Vibrometric Oy. Helsinki, Finland).
TYPE	
ORGANIZATION	Swedish Nuclear Fuel and Waste Management Co., Stock
TITLE	CROSSHOLE INVESTIGATIONS- SHORT AND MEDIUM RANGE SEI
	TOMOGRAPHY.
PUBLISH	February 1987. 41 p.
DATE	87/02/00
ABSTRACT	Seismic tomographic tests were conducted as a part o
	crosshole investigations program of the stripa proje
	has been to study if it is possible to detect by sei

KEYWORDS	tomography major fracture zones and determine their
LOCATION	and orientation.
REFERENCE	GEOLOGY: fractures.
AUTHOR	Davis, S.N.; Murphy, E.
TYPE	govt
ORGANIZATION	Arizona University, Tucson (USA). Dept. of Hydrology
TITLE	Resources; Nuclear Regulatory Commission, Washington DATING GROUND WATER AND THE EVALUATION OF REPOSITORI
PUBLISH	RADIOACTIVE WASTE.
DATE	Apr 1987. 194 p.
ABSTRACT	87/04/00 At least nine independent methods can be used to app groundwater ages. The methods vary widely in precisi give useful information. In complex ground-water sys many dating methods as possible should be used.
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	priv
TYPE	Earth Technology Corp., Long Beach, CA (USA); Battel
ORGANIZATION	Inst., Columbus, OH (USA). Office of Nuclear Waste I
TITLE	DEPOSITION OF CRETACEOUS AND TERTIARY SEDIMENTS IN T MISSISSIPPI SALT BASIN (WITH EMPHASIS ON THE RICHTON VOLUME 1.
PUBLISH	August 1987. 266 p.
DATE	87/08/00
ABSTRACT	Regional structure-contour and isochore maps were co selected Cretaceous and Tertiary lithostratigraphic eastern half of the basin.
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	Gruebler, G. (Duetsche Gesellschaft zum bau und Betr
TYPE	Endlagern fuer Abfallstoffe M.B.H., Peine, Germany,
ORGANIZATION	
TITLE	DESIGN AND PERFORMANCE OF THE UNDERGROUND INVESTIGAT GORLEBEN SALT DOME. (in German)
PUBLISH	Erzmetall. July-August 1987. V. 40(7/8) p. 366-371.
DATE	87/07-08/00
ABSTRACT	The gorleben salt dome has been under investigation ascertain it's suitability as a repository for radio wastes.
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	Beitz, J.V.; Bowers, D.L.; Doxtader, M.M.; Maroni, V
TYPE	D.T.
ORGANIZATION	govt
TITLE	Argonne National Lab. IL (USA). DETECTION AND SPECIATION OF TRANSURANIUM ELEMENTS IN GROUNDWATER VIA PULSED-LASER EXCITATION.
PUBLISH	1987. 16 p.
DATE	87/00/00

ABSTRACT

High sensitivity methods for detection and speciation of complexed transuranium ions in synthetic basalt groundwater.

KEYWORDS
LOCATION
REFERENCE

simplified analogues, are being developed which exploit in pulsed laser technology.
GEOLOGY: groundwater, chemistry, radionuclide migration

AUTHOR
TYPE
ORGANIZATION

Bode, W.; Baake, M.; Jockwer, N.

TITLE

Gesellschaft fuer Strahlen- und Umweltforschung M.B. Braunschweig (Germany) Inst. fuer Tieflagerung.
DETERMINATION OF HIGH VOLATILE COMPONENTS FROM TRIAS FROM ASSE. (in German)

PUBLISH
DATE
ABSTRACT

1987. 49 p.
87/00/00
During site investigations in the area of Asse Salt of drillings had been carried out, to investigate the and hydrogeological situation.
GEOLOGY: hydrogeology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E. S.P.; Kemeny, J.M.; Cook, N.G.W.
govt

PUBLISH

Lawrence Berkeley Lab. CA (USA).
DETERMINATION OF ROCK FRACTURE PARAMETERS FROM CRACK FAILURE IN COMPRESSION.

DATE
ABSTRACT

Rock Mechanics: Proceedings of the 28th US Symposium 1987. P. 367-374.
87/00/00
Microchemical models for axial splitting and for shear are used to investigate parameters associated with fracture under compressive stresses.
GEOLOGY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Kamineni, D.C.; Thivierge, R.H.; Stone, D.
govt

PUBLISH

Atomic Energy of Canada Limited.
DEVELOPMENT OF A CATACLASTIC FAULT ZONE IN AN ARCHEAN PLUTON OF THE SUPERIOR PROVINCE: STRUCTURAL, GEOCHEMICAL, GEOPHYSICAL CHARACTERISTICS.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Reprinted from American Journal of Science (May 1988) 288:458-494.
88/05/00

GEOLOGY: granite.

AUTHOR

Zimmerman, R.M.; Finley, R.E.; Schuch, R.L.; Dodds,

TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	DEVELOPMENT OF DIAMOND-TIPPED CHAIN SAWS FOR SLOT CU WELDED TUFF.
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 963-972.
DATE	87/00/00
ABSTRACT	This paper describes the development and performance of two chain saws, one with a 1.1 m bar and the other m bar, that were used to cut thin, >15 mm, slots.
KEYWORDS	GEOLOGY: engineering.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	DIFFUSIVITIES IN CRYSTALLINE ROCK MATERIALS.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 73.
DATE	85/09/00
ABSTRACT	
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Kaminen, D.C.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited
TITLE	DISTRIBUTION OF URANIUM, THORIUM AND RARE-EARTH ELEMENTS IN THE EYE-DASHWA LAKES PLUTON - A STUDY OF SOME ANALOGUE E
PUBLISH	Reprinted from Chemical Geology (1986) 55:361-373.
DATE	86/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: granite, chemistry.
LOCATION	
REFERENCE	
AUTHOR	Schaer, U. (SIA ASIC, Zurich, Switzerland).
TYPE	
ORGANIZATION	
TITLE	DOES GEOLOGY HELP IN THE FINAL DISPOSAL OF RADIOACTIVE WASTES (in German)
PUBLISH	Tech. Rundsch. 13 February 1987. V.79(7) P.36-39.
DATE	87/02/13
ABSTRACT	High-level radioactive wastes have to be stored safely for thousands of years in deep geological formations. The question discussed is whether or not a geological prognosis over a long span of time is possible. The main problem is groundwater. GEOLOGY: groundwater, disposal and storage alternatives.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Kelley, V.A.; Pickens, J.F.; Reeves, M.; Beauheim, R
TYPE	
ORGANIZATION	Sandia National Labs. NM (USA); Intera Technologies, Austin, TX (USA).
TITLE	DOUBLE-POROSITY TRACER-TEST ANALYSIS FOR INTERPRETATION OF

PUBLISH DATE ABSTRACT	FRACTURE CHARACTERISTICS OF A DOLOMITE FORMATION. 1987, 24 p. 87/00/00 Hydraulic and tracer testing studies have been performed of the regional hydrologic characterization of the W Isolation Pilot Plant (WIPP) site in southeastern Mexico. GEOLOGY: hydrology.
KEYWORDS LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Russo, A.J.; Reda, D.C. govt Sandia National Lab. NM (USA). DRYING OF AN INITIALLY SATURATED FRACTURED VOLCANIC TUFF. 14 April 1987. 25 p. 87/04/14 The isothermal drying of an initially saturated welded rock was studied experimentally. Gamma-beam densitometry was used to measure the material's effective porosity distribution during the drying experiment. GEOLOGY: tuff.
KEYWORDS LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	priv/govt Ontario Hydro. (Canada). DYNAMIC RESPONSE OF UNDERGROUND OPENINGS IN DISCONTINUOUS ROCK. 1984. 168 p. 84/00/00 GEOLOGY:
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E.; S.P.; Nipp, H.K.; McNulty, E.G. govt Federal Institute for Geosciences and Natural Resources EFFECTS OF MESH SIZE AND BOUNDARY CONDITIONS ON CREEP OF ROCK SALT. Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 653-662. 87/00/00 Mesh size, various boundary conditions, and consideration of the period affect prediction of creep closure around an
KEYWORDS LOCATION REFERENCE	borehole in salt. Test results are presented in this paper. GEOLOGY:
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Ramirez, A.L.; Daily, W.D.; Farmer, I.W.; Daemen, J.J.; C.S.; Glass, C.E.; Neumann, S.P. govt Lawrence Livermore National Lab. CA (USA). ELECTROMAGNETIC EXPERIMENT TO MAP IN SITU WATER IN HARD TUFF: PRELIMINARY RESULTS. Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 37-46. 87/00/00 The results of an experiment conducted in tunnel completion

KEYWORDS	Nevada Test Site to evaluate geotomography as a poss
LOCATION	candidate for in situ monitoring of hydrology in the
REFERENCE	of a heater placed in densely welded tuff are given.
	GEOLOGY: geologic disposal, tuff, monitoring.
AUTHOR	Coelho, P.P. (University of Western Ontario, London.
TYPE	Geology); Come, B. (CEC); Chapman, N.A. (BGS).
ORGANIZATION	acad
TITLE	Commission of the European Communities, Luxembourg.
	ELEMENT DISTRIBUTION ACROSS VEINS IN THE EAST BULL L
	ANORTHOSITE LAYERED INTRUSION, ALGOMA DISTRICT, ONT.
	EVALUATION OF MATRIX DIFFUSION.
PUBLISH	P. 261-274. Natural Analogues in Radioactive Waste D
	Proceedings of a Symposium Organized by the CEC and
	Brussels, BE, on 28-30 April 1987. London. Graham an
	1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	The chemical composition of such veins is compared t
	rock chemistry in order to evaluate the behavior of
	elements during alteration as a guide to radionuclid
	throughout the complex in the case of nuclear waste
	the area.
KEYWORDS	GEOLOGY: radionuclide migration, chemistry.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Institute, OH (USA). Office of Nuc
	Isolation.
TITLE	ERG REVIEW OF SALT CONSTITUTIVE LAW, SALT STRESS DET
	AND SALT CORROSION AND MODELLING STUDIES.
PUBLISH	March 1986.
DATE	86/03/00
ABSTRACT	
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	ESTIMATES OF VERTICAL HYDRAULIC CONDUCTIVITY IN THE
	SANDSTONE, MONTICELLO, UTAH.
PUBLISH	Colorado State University. 8TH Geohydro Waste Mgt. S
	(USA). Feb. 5-7, 1986. p. 143-153.
DATE	86/02/00
ABSTRACT	
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Wilkins, B.J.S.; Liner, Y.; Rigby, G.L.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	ESTIMATIONS OF CHANGES IN MICROCRACK-POPULATION, ELA
	AND PERMEABILITY, DUE TO DIFFERENTIAL-THERMAL EXPANS
	PLUTONIC ROCK SURROUNDING A NUCLEAR FUEL WASTE DISPO
PUBLISH	7 p. (1985). Reprinted from Materials Research Socie

DATE	Proceedings 50, Scientific Basis for Nuclear Waste M
ABSTRACT	IX, p. 99-105, 1985.
KEYWORDS	85/00/00
LOCATION	GEOLOGY: thermodynamics, granite.
REFERENCE	
AUTHOR	Wawersik, W.R.; Morgan, H.S.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	EVALUATING DESIGN PROCEDURES FOR STRUCTURES IN ROCK
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium
	1987. p. 107-116.
DATE	87/00/00
ABSTRACT	Validating design procedures for structures in salt accelerated by suitable laboratory or benchscale exp where in situ loading conditions with inhomogeneous fields and heating are simulated, controlled and rep Studies presented entail observations on rock salt a laboratory testing and on salt from around old mine
KEYWORDS	GEOLOGY: engineering, design.
LOCATION	
REFERENCE	
AUTHOR	Ramirez, A.L.; Daily, W.D. (Lawrence Livermore Natio
TYPE	Livermore, CA) govt
ORGANIZATION	
TITLE	EVALUATION OF ALTERANT GEOPHYSICAL TOMOGRAPHY IN WEL
PUBLISH	J. Geophys. Res. 10 July 1987. V.92(B8) P.7843-7853.
DATE	87/07/10
ABSTRACT	Electromagnetic measurements have been performed at evaluate the applicability of alterant geophysical t delineate in situ flow paths in a welded tuff rock m
KEYWORDS	GEOLOGY: tuff.
LOCATION	
REFERENCE	
AUTHOR	priv
TYPE	Earth Technology Corp. TX (USA).
ORGANIZATION	EVALUATION OF GEOLOGIC AND GEOPHYSICAL TECHNIQUES FO
TITLE	SURFACE-TO-SUBSURFACE PROJECTIONS OF GEOLOGIC CHARAC
PUBLISH	CRYSTALLINE ROCK.
DATE	1985. 33 p.
ABSTRACT	85/00/00
KEYWORDS	GEOLOGY: analytical techniques, crystalline.
LOCATION	
REFERENCE	
AUTHOR	Gascoyne, M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	EVIDENCE FOR THE STABILITY OF THE POTENTIAL NUCLEAR
PUBLISH	SPHENE, OVER GEOLOGICAL TIME, FROM URANIUM-LEAD AGES
DATE	URANIUM-SERIES MEASUREMENTS.
	12 p. (1986). Reprinted from Applied Geochemistry (1
	1:199-210.
	86/00/00

ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Haase, C.S.; Gillis, G.A.; King, H.L.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	FISCAL YEAR 1985 GROUNDWATER INVESTIGATION DRILLING THE Y-12 PLANT, OAK RIDGE, TN: ENVIRONMENTAL SCIENCE PUBLICATION NO. 2805.
PUBLISH	January 1987. 108 p.
DATE	87/01/00
ABSTRACT	Groundwater investigation drilling operations at ten currently used waste disposal sites in the Y-12 vinc been completed.
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E. S.P.; Dey, T.N.; Kranz, R.L.
TYPE	govt
ORGANIZATION	Los Alamos Lab. NM (USA).
TITLE	FLAKE MECHANICS, BOREHOLE BREAKOUTS AND THERMAL SPAL
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 413-420.
DATE	87/00/00
ABSTRACT	The authors present a theory which assumes a uniaxia mechanism in relation to borehole breakouts. The res on rock failure due to high compressive stresses par free surface.
KEYWORDS	GEOLOGY: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Lu, A.H.; Sagar, B.; Guenther, R.B.; Hudspeth, R.T.
TYPE	Hanford Operations, Richland, WA)
ORGANIZATION	priv
TITLE	FLOW EQUATIONS IN TERMS OF PIEZOMETER LEVELS FOR NON FLUID IN LOW-PERMEABILITY POROUS MEDIUM.
PUBLISH	Water Resource Res. June 1987. V. 23(6) P. 1097-1102
DATE	87/06/00
ABSTRACT	The basalt waste isolation project is investigating flows for the disposal of high-level nuclear waste. spans of interest are so long that site performance projected by mathematical modelling.
KEYWORDS	GEOLOGY: basalt, modelling.
LOCATION	
REFERENCE	
AUTHOR	Rasmussen, T.C; Evans, D.D.
TYPE	govt
ORGANIZATION	Nuclear Regulatory Commission, Washington, D.C. (USA)
TITLE	FLUID FLOW AND SOLUTE TRANSPORT MODELLING THROUGH THREE-DIMENSIONAL NETWORKS OF VARIABLY SATURATED DIS FRACTURES.
PUBLISH	Jan. 1989. 193 p.
DATE	89/01/00
ABSTRACT	The boundary integral method is used to estimate hyd

KEYWORDS
LOCATION
REFERENCE

solute transport properties of unsaturated, fracture
solving the boundary value problem within intersect
planes. Flow through both impermeable and permeable
determined using two and three-dimensional formulat
results of these tests are discussed.
GEOLOGY: hydrogeology.

AUTHOR

Brereton, N.R.; McEwen, T.J.; Lee, M.K. (British Ge

TYPE
ORGANIZATION
TITLE

Survey, Keyworth, UK)

PUBLISH
DATE
ABSTRACT

FLUID FLOW IN CRYSTALLINE ROCKS: RELATIONSHIPS BETWEEN
GROUNDWATER SPRING ALIGNMENTS AND OTHER SURFACE LINE
ALTNABREAC, UK.

J. Geophys. Res. 10 July 1987. V.92(B8) P.7797-7806.
87/07/10

The Strath Halladale granite has been studied with a
establishing a relationship between the regional dis
faults and fracture zones, surface discharges of gro
and groundwater flow sysems.

GEOLOGY: groundwater, granite, fractures.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Zhou, Q.; Becker, A.; Goldstein, N.E.; Morrison, H.F.
acad

University of California. CA (USA).

FRACTURE DETECTION USING SUBSURFACE ELECTROMAGNETIC
Rock Mechanics: Proceedings of the 28th US Symposium
1987. p. 5-18.

87/00/00

Audio frequency subsurface electromagnetic technique
cross-hole and in-hole arrays for fracture detection
evaluated numerically.

GEOLOGY: analytical techniques.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E.
S.P.; Sour, L.; Ubbes, W.

TYPE
ORGANIZATION
TITLE
PUBLISH

acad

Colorado School of Mines. CO (USA).

FRACTURE FLOW RESPONSE TO APPLIED STRESS: A FIELD ST
Rock Mechanics: Proceedings of the 28th US Symposium
1987. p. 501-508.

87/00/00

A series of experiments that measured the mechanical
hydrological responses of a single natural fracture
controlled stress conditions in-situ has been perfor
Colorado School of Mines. The fracture tests are des
relation to the disposal of nuclear waste in crystal
repositories.

GEOLOGY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

acad

TITLE	FRACTURE PERMEABILITY OF CLAYS: A REVIEW.
PUBLISH	Radioactive Waste Management & the Nuclear Fuel Cycl
DATE	1986. V. 7(3). p. 253-278.
ABSTRACT	86/08/00
KEYWORDS	GEOLOGY: clay.
LOCATION	
REFERENCE	
AUTHOR	Evans, D.D.; Rasmussen, T.C.; Nicholson, T.J. (Univ.
	Tucson, AZ)
	Post, R.G. (ed.)
TYPE	acad
ORGANIZATION	
TITLE	FRACTURE SYSTEM CHARACTERIZATION FOR UNSATURATED ROC
PUBLISH	P. 201-208. Waste Management '87: Waste Isolation in
	Technical Programs, and Public Education. Tucson, AZ
	of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Techniques for estimating fluid flow through fractur
	tuffs are presented.
KEYWORDS	GEOLOGY: fractures.
LOCATION	
REFERENCE	
AUTHOR	Carlos, B.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	FRACTURE-COATING MINERALS IN THE TOPOPAH SPRING MEMB
	TUFF OF CALICO HILLS FROM DRILL HOLE J-13.
PUBLISH	Feb. 1989. 21 p.
DATE	89/02/00
ABSTRACT	Fracture lining minerals from drill core in the Topo
	Member of the Paintbrush Tuff and the tuff of Calico
	water well J-13 were studied to identify the differe
	these minerals and those seen in drill core USW G-4.
	differences and their possible meanings are discusse
KEYWORDS	GEOLOGY: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Meyer, R.E.; Arnold, W.D.; Ho, P.C.; Case, F.I.; O'K
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	GEOCHEMICAL BEHAVIOR OF CS, SR, TC, NP, AND U IN SAL
	GROUNDWATERS: SORPTION EXPERIMENTS ON SHALES AND THE
	MINERAL COMPONENTS: PROGRESS REPORT.
PUBLISH	November 1987. 55 p.
DATE	87/11/00
ABSTRACT	The sedimentary rock program at the Oak Ridge Nation
	investigating shale to determine its potential suita
	host rock for the disposal of high-level radioactive
KEYWORDS	GEOLOGY: groundwater, shale.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Ozima, M.
priv

GEOHISTORY: GLOBAL EVOLUTION OF THE EARTH.
Springer-Verlag, NY (USA). 1987. 170 p.
87/00/00

This book traces the evolution of the Earth, mainly of radiogenic isotopes from half-life parent element discusses it in terms of the latest developments in astrophysical theory. This study offers an approach forecasting the future of the Earth yielding clues for understanding of environmental problems, such as rad waste to disposal and climate changes due to CO₂ increase.

GEOLOGY: analytical techniques.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Thordarson, W. et al
govt

GEOHYDROLOGY OF TEST WELL USW H-3, YUCCA MOUNTAIN, NEVADA.

PUBLISH
DATE
ABSTRACT

USGS Water Resources Investigations Report 84-4272.
85/00/00

An exploratory test well was drilled into tuff in the southwestern part of the Nevada Test Site, as part of an investigation related to the isolation of high-level wastes. Hydrologic characteristics of the site are determined to determine the suitability of tuffs for isolating such wastes.
GEOLOGY: tuff, geologic disposal.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Thury, M. (Nationale Genossenschaft fuer die Lagerung Abfall, Baden, Switzerland).

PUBLISH
DATE
ABSTRACT

GEOLOGICAL INVESTIGATIONS FOR THE FINAL DISPOSAL OF RADIOACTIVE WASTES. (in German)
Tech. Rundsch. 13 February 1987. V.79(7) P.24-32.
87/02/13

The contribution of geology to the safety of a final repository for high-level radioactive wastes is discussed.

GEOLOGY: safety analysis, disposal and storage alternatives.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Brown, P.A.; Brown, A.; Kamineni, G.; McCrank, N.; S

TYPE
ORGANIZATION
TITLE

assoc

Canadian Nuclear Society. (Canada).

GEOLOGICAL RESULTS FROM THREE RESEARCH AREAS AND THE CONTRIBUTION TO THE NUCLEAR FUEL WASTE MANAGEMENT PROGRAM.

PUBLISH

Canadian Nuclear Society 2nd International Conference on Radioactive Waste Management. Sept. 7-11, 1986. p. 3

DATE

86/09/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

GEOLOGY:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Wilder, D.G.; Yow, J.L. Jr.
govt
Lawrence Livermore National Lab. CA (USA).
GEOMECHANICS OF THE SPENT FUEL TEST: CLIMAX.
July 1987. 89 p.
87/07/00

The measurements program examines both gross and local responses of the rock mass to thermal loading, to evaluate thermomechanical response of seared and fractured rock of relatively unfractured rock.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: granite, geology, fractures, thermodynamics

AUTHOR
TYPE
ORGANIZATION
TITLE

Lee, M.K. (British Geological Survey, Keyworth, Nottingham)

GEOPHYSICAL INVESTIGATIONS IN THE STRATH HALLADALE-A DISTRICT (NORTHEAST SCOTLAND) IN RELATION TO RADIOACTIVE DISPOSAL.

PUBLISH
DATE
ABSTRACT

J. Geophys. Res. 10 July 1987. V.92(B8) P.7807-7819.
87/07/10

A series of geophysical studies have been carried out on Strath Halladale granite as part of a multidisciplinary programme into the suitability of granitic rocks for waste disposal.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: granite.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Gibb, R.A.; Scott, J.S.

govt
Atomic Energy of Canada Limited.
GEOPHYSICAL METHODS FOR EVALUATION OF PLUTONIC ROCKS
1986. 99 p.
86/00/00

GEOLOGY: granite.

AUTHOR
TYPE
ORGANIZATION
TITLE

Filippi, C.; Fourniguet, J.; Godefroy, P.; Manigault
Peaudecerf, P.

assoc
Commission of the European Communities, Luxembourg.
GEOPROSPECTIVE STUDY OF RADIOACTIVE WASTE REPOSITORIES
A PALEOSITE.

PUBLISH
DATE
ABSTRACT

1987. 75 p.
87/00/00

The aim of this research is to validate the geoprospect approach elaborated previously in the framework of cooperation with Commission of European Communities.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: geologic disposal.

AUTHOR	Whitaker, S.H. (AECL, Pinawa, Manitoba, Whiteshell Research Establishment)
TYPE	govt
ORGANIZATION	
TITLE	GEOSCIENCE RESEARCH FOR THE CANADIAN NUCLEAR FUEL WASTE MANAGEMENT PROGRAM.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. September 8(2-3) P. 145-195.
DATE	87/09/00
ABSTRACT	The CNFWMP is assessing the concept of deep geologic nuclear fuel waste in plutonic rock. As part of that a broad program of geoscience and geotechnical work undertaken to develop methods for characterizing sites incorporating geotechnical data into disposal facilities and incorporating geotechnical data into environmental safety assessment of the disposal system.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	

AUTHOR	Horseman, S.T.; Winter, M.G.; Enwistle, D.C.
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	GEOTECHNICAL CHARACTERIZATION OF BOOM CLAY IN RELATION TO DISPOSAL OF RADIOACTIVE WASTE.
PUBLISH	1987. 95 p.
DATE	87/00/00
ABSTRACT	This report describes the results of a laboratory study of the geotechnical properties of the tertiary boom clay.
KEYWORDS	GEOLOGY: disposal and storage alternatives, clay.
LOCATION	
REFERENCE	

AUTHOR	Bibler, N.E., et al.
TYPE	assoc
ORGANIZATION	American Institute of Chemical Engineers, MA (USA).

TITLE	GLASS PERFORMANCE IN A GEOLOGIC SETTING.
PUBLISH	Proceedings of the Summer National Meeting of the American Institute of Chemical Engineers, August 24-27, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: glass.
LOCATION	
REFERENCE	

AUTHOR	Weiss, David
TYPE	priv
ORGANIZATION	The Center for Alternative Mining Development Policy
TITLE	HIGH-LEVEL RADIOACTIVE WASTE DISPOSAL IN THE UPPER MISSISSIPPI RIVER VALLEY.
PUBLISH	Madison, 1981, 11pp.
DATE	81/00/00
ABSTRACT	Reviews geological and hydrogeological concerns in connection with the siting of high-level nuclear waste repositories.
KEYWORDS	GEOLOGY; hydrogeology
LOCATION	1121 University Ave. Madison, WI 53715
REFERENCE	anne

AUTHOR	Gascoyne, M.; Cramer, J.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.

TITLE	HISTORY OF ACTINIDE AND MINOR ELEMENT MOBILITY IN AN GRANITIC BATHOLITH IN MANITOBA, CANADA.
PUBLISH	Applied Geochemistry. Jan-Feb. 1987. V. 2(1) p. 37-5
DATE	87/01/00
ABSTRACT	Analysis of surface and borehole core samples indica multi-stage history of alteration and concomitant el migration for fractures in granite at Lac du Bonnet, results provide qualitative analogues for predicting performance of a nuclear fuel waste vault deep in pl
KEYWORDS	GEOLOGY: geologic disposal, natural analogues.
LOCATION	
REFERENCE	
AUTHOR	Pyrack-Nolte, L.J.; Myer, L.R.; Cook, N.G.W.; Wither
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	HYDRAULIC AND MECHANICAL PROPERTIES OF NATURAL FRACT LOW-PERMEABILITY ROCK.
PUBLISH	January 1987. 10 p.
DATE	87/01/00
ABSTRACT	The results of a comprehensive laboratory study of t displacement, permeability and void geometry of sing fractures in a quartz monzonite are summarized and a
KEYWORDS	GEOLOGY: fractures.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	HYDRAULIC COMPRESSION OF SHAFT BACKFILL AT THE BACKF INTERFACE.
PUBLISH	1986. 1 V.
DATE	86/00/00
ABSTRACT	
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	

AUTHOR	Thoms, R.L.; Gehle, R.M.; Farmer, I.W.; Daemen, J.J. C.S.; Glass, C.E.; Neumann, S.P.
TYPE	priv
ORGANIZATION	Applied Geomechanics Inc. LA (USA).
TITLE	HYDRAULIC FRACTURE TESTS IN A GULF COAST SALT DOME.
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 241-248.
DATE	87/00/00
ABSTRACT	Wireline hydraulic fracturing equipment and procedur developed for testing in fluid-filled holes in salt Tests indicated a larger formation resistance to fra propagation than currently used for design of storag gulf coast salt domes.
KEYWORDS	GEOLOGY: salt, monitoring.
LOCATION	
REFERENCE	

AUTHOR	Anderson, P.; Klockars, C.E.
TYPE	govt
ORGANIZATION	Svensk Karnbranslehantering AB (Sweden).
TITLE	HYDROGEOLOGICAL INVESTIGATIONS AND TRACER TESTS IN A ROCK MASS IN THE STRIPA MINE.

PUBLISH	SKB Technical Report 85-12.
DATE	85/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: hydrogeology.
LOCATION	
REFERENCE	
AUTHOR	Glasbergen, P. (RIVM, Bilthoven, Netherlands) Come, B. (CEC); Chapman, N.B. (BGS).
TYPE	
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	HYDROLOGICAL MODEL STUDIES AND NATURAL ISOTOPE DATA FOR GROUNDWATER FLOW IN DEEP SEDIMENTARY BASINS.
PUBLISH	p. 420-435. Natural Analogues in Radioactive Waste I Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham ar 1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	The study of the flow system in deep aquifers is rel safety assessment studies of geologic disposal of ra waste.
KEYWORDS	GEOLOGY: groundwater, hydrogeology, safety analysis.
LOCATION	
REFERENCE	
AUTHOR	Daily, W.; Lin, W.; Buscheck, T. (Lawrence Livermore Lab, Livermore, CA)
TYPE	govt
ORGANIZATION	
TITLE	HYDROLOGICAL PROPERTIES OF TOPOPAH SPRING TUFF: LABO MEASUREMENTS.
PUBLISH	J. Geophys. Res. 10 July 1987. V.92(B8) . 7854-7864.
DATE	87/07/10
ABSTRACT	The purpose of this work is to study the transport c tuff from the Topopah spring welded unit under condi expected in the near-field environment of a high-lev waste container.
KEYWORDS	GEOLOGY: groundwater, tuff.
LOCATION	
REFERENCE	
AUTHOR	Griffault, L.; Jebrak, M.; Lemiere, B.; Piantone, P. J.F.
TYPE	
ORGANIZATION	Come, B. (CEC); Chapman, N.A. (BGS).
TITLE	Commission of the European Communities, Luxembourg. HYDROTHERMAL ALTERATION SYSTEMS AS ANALOGUES OF NUCI REPOSITORIES IN GRANITIC ROCKS. AN EXAMPLE: THE LANG HYDROTHERMAL SYSTEM.
PUBLISH	P. 191-204. Natural Analogues in Radioactive Waste D Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	The results of this partial study on element distrib hydrothermally altered granite lead to conclude on..
KEYWORDS	GEOLOGY: granite, thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Halstead, Bob

TYPE	govt
ORGANIZATION	State of Wisconsin, Radioactive Waste Review Board.
TITLE	IMPLICATIONS OF DOE'S CANADIAN RESEARCH AGREEMENT.
PUBLISH	Memo, Madison, August, 1986, 4pp.
DATE	86/08/22
ABSTRACT	Memo summarizing the implications of continuation of co-operative agreement between U.S. DOE and AECL on waste program in the U.S. Concludes that the agreement continued DOE work on crystalline rock in spite of t
KEYWORDS	congressional deferral of the second-round program, for early resumption of crystalline rock program in especially if technical problems are encountered in first-round program.
LOCATION	GEOLOGY: granite
REFERENCE	anne
AUTHOR	Haensel, W.
TYPE	
ORGANIZATION	Gesellschaft fuer Strahlen- und Umweltforschung M.B.H. Braunschweig, Germany, F.R. Inst. fuer Tieflagerung.
TITLE	IN-SITU PERMEABILITY MEASUREMENTS IN THE BEDROCK SUR UNDERGROUND CAVITIES, USING THE EXAMPLE OF KONRAD MI German)
PUBLISH	1987. 79 p.
DATE	87/00/00
ABSTRACT	When assessing the safety for underground storage si permeability of the system and the surrounding bedro utmost importance.
KEYWORDS	GEOLOGY: safety analysis.
LOCATION	
REFERENCE	
AUTHOR	Eslinger, P.W. (Boeing Computer Services Co., Richla Sagar, B. (Rockwell International Corp., Richland, W priv
TYPE	
ORGANIZATION	Nuclear Energy Agency. Paris (France).
TITLE	INCORPORATION OF UNCERTAINTY ANALYSIS IN ASSESSMENT SITE FOR HIGH-LEVEL RADIOACTIVE WASTE DISPOSAL: STAT ASPECTS.
PUBLISH	P.221-235. Uncertainty Analysis for Performance Asse Radioactive Waste Disposal Systems. Proceedings of a workshop. Paris, France. Organization for Economic C and Development. 1987. 258 p.
DATE	87/00/00
ABSTRACT	The effect of uncertainties inherent in characterizi systems must be evaluated during assessment of repos performance. After providing some background informa basalt site and nature of applicable regulatory requ application of the Monte Carlo method to the total s performance is discussed
KEYWORDS	GEOLOGY: basalt, regulations, geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Wilder, D.G.; Farmer, I.W.; Daemen, J.J.; Desai, C.S C.E.; Neumann, S.P.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA (USA).
TITLE	INFLUENCE OF STRESS-INDUCED DEFORMATIONS ON OBSERVED IN FRACTURES OF THE CLIMAX GRANITIC STOCK.

PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium
DATE	1987. p. 491-500.
ABSTRACT	87/00/00 Three examples of stress induced influence on fracture hydrology were noted in drifts 1400 ft. below surface granite. Interpretations of test results are given.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Gruber, J. (Environmental Science Group, Health, Safety, Environment Div., Los Alamos National Lab., Los Alamos, N.M., R.G. (ed.)
TYPE	govt
ORGANIZATION	
TITLE	INSTABILITY OF WASTE PLUMES ADSORBED ON IRON OXIDE
PUBLISH	P. 397-402. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ: Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Iron oxide coatings on the solid matrix dominate adsorption in many soils. Their adsorption characteristics vary considerably with the composition of the soil pore water.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Bath, G.D.; Jahren, C.E.
TYPE	govt
ORGANIZATION	
TITLE	INTERPRETATIONS OF MAGNETIC ANOMALIES AT A POTENTIAL WASTE SITE LOCATED IN THE YUCCA MOUNTAIN AREA, NEVADA TEST SITE
PUBLISH	USGS Open File Report 84-120. 1984. 44 p.
DATE	84/00/00
ABSTRACT	Studies of the relation of magnetic properties to geologic features have provided structural information at and around a potential site for storage of radioactive waste near Yucca Mountain.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	INVESTIGATIONS OF FRACTURE ZONES IN CRYSTALLINE ROCK BY SEISMIC RADAR.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 145.
DATE	85/09/00
ABSTRACT	
KEYWORDS	GEOLOGY:

LOCATION REFERENCE	
AUTHOR	Bachman, G.O.
TYPE	
ORGANIZATION	Bachman, G.O., Albuquerque, NM; Sandia National Labs
TITLE	KARST IN EVAPORITES IN SOUTHEASTERN NEW MEXICO.
PUBLISH	September 1987. 82 p.
DATE	87/09/00
ABSTRACT	Permian evaporites in SE New Mexico include gypsum, and salt, which are subject to both blanket and local dissolution.
KEYWORDS	GEOLOGY: groundwater.
LOCATION REFERENCE	
AUTHOR	Board, M.P.; Wilson, M.L.; Voegle, M.D.
TYPE	priv
ORGANIZATION	Science Applications International Corp. NV (USA).
TITLE	LABORATORY DETERMINATION OF THE MECHANICAL, ULTRASONIC HYDROLOGIC PROPERTIES OF WELDED TUFF FROM THE GROUSE HEATED BLOCK SITE: NEVADA NUCLEAR WASTE STORAGE INVESTIGATION PROJECT.
PUBLISH	Aug. 1987. 97 p.
DATE	87/08/00
ABSTRACT	The mechanical, ultrasonic, and hydrologic properties taken from the Grouse Canyon member of the belted rhyolite exposed in the GTUF heated block alcove, U12G tunnel test site, are described.
KEYWORDS	GEOLOGY:
LOCATION REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	It Corp., Albuquerque, NM; Battelle Memorial Inst., Office of Nuclear Waste Isolation.
TITLE	LABORATORY INVESTIGATION OF CRUSHED SALT CONSOLIDATION FRACTURE HEALING.
PUBLISH	January 1987. 202 p.
DATE	87/01/00
ABSTRACT	A laboratory test program was conducted to investigate consolidation behavior of crushed salt and fracture natural and artificial salt.
KEYWORDS	GEOLOGY: salt, fractures.
LOCATION REFERENCE	
AUTHOR	Sundaram, P.N.; Watkins, D.J.; Ralph, W.E.; Farmer, J.J.; Desai, C.S.; Glass, C.E.; Neumann, S.P.
TYPE	priv/govt
ORGANIZATION	Lawrence Livermore National Lab. CA; Bechtel Civil I
TITLE	LABORATORY INVESTIGATIONS OF COUPLED STRESS-DEFORMATION FLOW IN A NATURAL ROCK FRACTURE.
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 585-592.
DATE	87/00/00
ABSTRACT	Radial flow tests under several cycles of normal loading performed on a natural fracture in a 0.914 m diameter cylinder. Explanations of previous theories and studies

KEYWORDS	as the present one are given.
LOCATION	GEOLOGY:
REFERENCE	
AUTHOR	Campbell, K.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. CA (USA).
TITLE	LATERAL CONTINUITY OF SORPTIVE MINERAL ZONES UNDERLY MOUNTAIN, NEVADA.
PUBLISH	August 1987. 50 p.
DATE	87/08/00
ABSTRACT	Mineralogical investigations at Yucca Mountain are characterizing this site for a potential nuclear repository.
KEYWORDS	GEOLOGY: siting.
LOCATION	
REFERENCE	
AUTHOR	Devgun, J.S.; Wilkinson, S.R.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	LONG-TERM PREDICTIONS OF WATER TABLE FROM PRECIPITATION FOR A WASTE DISPOSAL SITE.
PUBLISH	Presented at Waste Management '88, Tucson, Arizona, March 3 1988.
DATE	88/02/28
ABSTRACT	
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Bibler, N.E.; Jantzen, C.M. (E.I. Du Pont de Nemours & Co., Aiken, SC)
TYPE	priv
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	MATERIALS INTERACTIONS RELATING TO LONG-TERM GEOLOGICAL NUCLEAR WASTE GLASS.
PUBLISH	P. 47-66. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
DATE	
ABSTRACT	This review paper systemizes the additional interactions of materials in the waste package will impose on the host rock.
KEYWORDS	glass waste form - groundwater interactions. The repository geologies reviewed are tuff, salt, basalt and granite.
LOCATION	GEOLOGY: tuff, salt, basalt, granite.
REFERENCE	
AUTHOR	Ashworth, T.; Smith, D.R.; Ashworth, E.
TYPE	acad
ORGANIZATION	
TITLE	MEASUREMENT METHODS FOR THERMAL TRANSPORT PROPERTIES
PUBLISH	26th US Symposium on Rock Mechanics. June 26-28, 1985/00/00
DATE	
ABSTRACT	
KEYWORDS	GEOLOGY: radionuclide migration.
LOCATION	
REFERENCE	

AUTHOR	Heimann, R.B.; Hooton, R.D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	MINERALOGICAL CHANGES OF VARIOUS CEMENT FORMULATIONS REACTION WITH GROUNDWATER IN THE PRESENCE OF CA- AND NA-BENTONITE AT 150°C.
PUBLISH	13 p. (1986). Reprinted from Canadian Mineralogist (
DATE	24:289-302.
ABSTRACT	86/00/00
KEYWORDS	GEOLOGY: groundwater, cement.
LOCATION	
REFERENCE	
AUTHOR	Lee, S.Y.; Hyder, L.K.; Alley, P.D.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	MINERALOGICAL CHARACTERIZATION OF SELECTED SHALES IN NUCLEAR WASTE REPOSITORY STUDIES: PROGRESS REPORT.
PUBLISH	December 1987. 75 p.
DATE	87/12/00
ABSTRACT	Because baseline characterization of shale mineralog to the interpretation of results from experiments on radionuclide retardation, groundwater-shale interact physicochemical characteristics, a protocol for quan mineralogical analyses has been developed by integra geochemical and instrumental techniques for the inve properties related to repository performance.
KEYWORDS	GEOLOGY: shale, groundwater, chemistry.
LOCATION	
REFERENCE	
AUTHOR	Case, J.B.; Kelsall, P.C.
TYPE	priv/govt
ORGANIZATION	It Corp. Albuquerque, NM; Sandia National Lab. NM (U
TITLE	MODIFICATION OF ROCK MASS PERMEABILITY IN THE ZONE S SHAFT IN FRACTURED, WELDED TUFF.
PUBLISH	March 1987. 91 p.
DATE	87/03/00
ABSTRACT	The excavation of a nuclear waste repository at Yucc requires access through shafts and ramps from the gr to the repository horizon. To evaluate the need and of the sealing subsystem, it is necessary to predict modifications in the rock immediately surrounding th
KEYWORDS	GEOLOGY: tuff, fractures.
LOCATION	
REFERENCE	
AUTHOR	Gopal, S.; Ballinger, R.; Cunnane, J.; Kuhn, W.; Lee P.; Westerman, R.
TYPE	acad
ORGANIZATION	Battelle Memorial Inst., Columbus, OH. Office of Nuc Isolation.
TITLE	MULTIFACTOR TEST DESIGN TO INVESTIGATE UNIFORM CORRO LOW-CARBON STEEL IN A NUCLEAR WASTE SALT REPOSITORY
PUBLISH	June 1987. 112 p.
DATE	87/06/00
ABSTRACT	The salt repository project panel on the experimenta the uniform corrosion of low-carbon steel was conven develop a well-documented consensus test matrix.
KEYWORDS	GEOLOGY: salt, corrosion, steel, disposal and storag

LOCATION REFERENCE	alternatives.
AUTHOR	Alexander, W.R.; Scott, R.D.; Mackenzie, A.B. (Scott Universities Research and Reactor Centre, Glasgow, U.K.); McKinley, I.G. (Eidgenoessisches Inst. fuer Reaktorfuhrung, Wuerenlingen, Switzerland); Come, B. (Commission of the European Communities, Brussels, Belgium); Chapman, N.A. (British Geological Survey, Keyworth).
TYPE	Commission of the European Communities, Luxembourg.
ORGANIZATION	NATURAL ANALOGUE STUDIES AT GRIMSEL, SOUTHERN SWITZERLAND
TITLE	P. 473-484. Natural Analogues in Radioactive Waste Management. Proceedings of a symposium organized by the CEC and the Commission of the European Communities, Brussels, 1987. 506 p. Radioactive Waste Management Series.
PUBLISH	87/04/00
DATE	As an analogue to processes affecting radionuclide migration in crystalline rock waste repository, the distribution of decay series radionuclides and rare earth elements has been examined.
ABSTRACT	GEOLOGY: radionuclide migration.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Eyal, Y.; Lumpkin, G.R.; Ewing, R.C. (Technion-Israel Institute of Technology, Haifa); Bates, J.K.; Seefeldt, W.B. (eds.)
TYPE	acad
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	NATURAL ANNEALING OF ALPHA-RECOIL DAMAGE IN METAMICTIC THE THORITE GROUP.
PUBLISH	P. 635-643. Scientific Basis for Nuclear Waste Management. Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
DATE	Minerals of the thorite mineral group have been leached in bicarbonate-carbonate solutions for time periods up to 288 days.
ABSTRACT	GEOLOGY: leaching, chemistry.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Rajen, G.; Kulacki, F.A. (Dept. of Mechanical Engineering, Colorado State Univ., Fort Collins, CO); McAssey, E.V.; Schrock, V.E. (eds.)
TYPE	acad
ORGANIZATION	
TITLE	NATURAL CONVECTION IN A POROUS LAYER LOCALLY HEATED REGIONAL LABORATORY MODEL FOR A NUCLEAR WASTE REPOSITORY
PUBLISH	P. 19-26. Heat Transfer Problems in Nuclear Waste Management. New York, NY. American Society of Mechanical Engineers. 1987/00/00
DATE	This paper reports a numerical and experimental study of convective flow and heat transfer in a rectangular two-dimensional domain approximating the region around a waste repository.
ABSTRACT	GEOLOGY: thermodynamics.
KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	govt
TYPE	Battelle Memorial Institute, OH (USA). Office of Nuc
ORGANIZATION	Isolation.
TITLE	NATURE OF THE INTERFACIAL REGION BETWEEN CEMENTITIOUS
PUBLISH	AND ROCKS FROM THE PALO, DURO BASIN AND OTHER SEAL C
DATE	March 1986.
ABSTRACT	86/03/00
KEYWORDS	GEOLOGY: cement.
LOCATION	
REFERENCE	
AUTHOR	Muehlenweg, U.; Lieser, K.H. (Technische Hochschule
TYPE	Germany, F.R. Inst. fuer Kernchemie)
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
TITLE	Radiochemie; Commission of the European Communities,
PUBLISH	(Belgium).
DATE	NEPTUNIUM IN THE GEOSPHERE.
ABSTRACT	P. 70. Chemistry and Migration Behavior of Actinides
KEYWORDS	Products in the Geosphere. Abstracts. 1987. 196 p.
LOCATION	87/00/00
REFERENCE	Published in summary form only.
	GEOLOGY: radionuclide migration.
AUTHOR	priv
TYPE	Fenix and Scisson, Inc., Mercury, NV (USA).
ORGANIZATION	NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS (NNWSI)
TITLE	MINING SUMMARY.
PUBLISH	July 1987. 40 p.
DATE	87/07/00
ABSTRACT	This is a summary report for all boreholes drilled p
KEYWORDS	1, 1987, in support of the NNWSI.
LOCATION	GEOLOGY:
REFERENCE	
AUTHOR	priv
TYPE	Fenix and Scisson, Inc., Mercury, NV (USA).
ORGANIZATION	NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS (NNWSI)
TITLE	HISTORIES: UNSATURATED ZONE-NEUTRON HOLES: 76 BOREHO
PUBLISH	BETWEEN MAY 1984 AND FEBRUARY 1986.
DATE	May 1987. 311 p.
ABSTRACT	87/05/00
KEYWORDS	This is a compilation of data from 74 shallow alluvi
LOCATION	exploratory core holes and two shallow calibration c
REFERENCE	GEOLOGY:
AUTHOR	priv
TYPE	Fenix and Scisson, Inc., Mercury, NV (USA).
ORGANIZATION	NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS (NNWSI)
TITLE	HISTORIES, USW UZ-1, UE-25 UZ NO.4, UE-25 NO.5, USW
	UZ-6S, USW UZ-7, USW UZ-8, USW UZ-13.

TITLE	(Canada).
PUBLISH	ON THE POSSIBILITY OF DETERMINING RATES OF REMOVAL O
DATE	FROM CRYSTALLINE IGNEOUS ROCKS USING U-SERIES DISEQU
ABSTRACT	APPLICABILITY OF A U-LEACH MODEL TO MINERAL SEPARATE
	Applied Geochemistry. Jan-Feb. 1987. V. 2(1) p.67-71
	87/01/00
	Preliminary U-series data are presented on the diseq
	mineral separates of surface samples from the Eye-Da
	Granite (Canada).
KEYWORDS	GEOLOGY: chemistry.
LOCATION	
REFERENCE	
AUTHOR	Farmer, I.W.; Daemen, J.J.K.; Desai, C.S.; Glass, C.
	S.P.
TYPE	
ORGANIZATION	
TITLE	PERMEABILITY CHANGES DURING SHEAR DEFORMATION OF FRA
PUBLISH	Rock Mechanics: Proceedings of the 28th US Symposium
	1987. p. 473-480.
DATE	87/00/00
ABSTRACT	The effect of shear deformation on the permeability
	rock has been investigated in drained triaxial compr
	experiments on prefractured samples of coconino sand
	GEOLOGY: analytical techniques.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Myer, L.R.; Christian, .L.
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	PERMEABILITY OF SHALE AT ELEVATED TEMPERATURE AND PR
	METHODOLOGY AND PRELIMINARY RESULTS.
PUBLISH	May 1987. 34 p.
DATE	8/05/00
ABSTRACT	A method of measuring the hydraulic conductivity of
	permeability shale as a function of pressure and tem
	been developed and successfully demonstrated.
	GEOLOGY: shale.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Zucca, J.J.
TYPE	govt
ORGANIZATION	
TITLE	PETITE SISMIQUE MEASUREMENTS AT THE SPENT FUEL TEST-
PUBLISH	LLNL Report UCRL-53597. Sept. 1984. 29 p.
DATE	84/09/00
ABSTRACT	A petite sismique estimate of the deformation modulu
	conducted during May 1984 at the Spent Fuel Test-Cli
	at the Nevada Test Site. The technique and results a
	described.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: geologic disposal.

AUTHOR
TYPE
ORGANIZATION
TITLE

Knaus, K.
govt

PETROLOGIC AND GEOCHEMICAL CHARACTERIZATION OF THE
MEMBER OF THE PAINTBRUSH TUFF: OUTCROP SAMPLES USED
PACKAGE EXPERIMENTS.

PUBLISH
DATE
ABSTRACT

LLNL Report UCRL-53558. June 1984. 36 p.
84/06/00

Characterization studies conducted with outcrop sampl
Topopah Spring Member of the Paintbrush Tuff are sui
GEOLOGY: siting.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Price, R.H.; Connolly, J.R.; Keil, K.
govt/acad

Sandia National Lab. NM; New Mexico University, Albu
(USA).

TITLE

PETROLOGIC AND MECHANICAL PROPERTIES OF OUTCROP SAMPL
WELDED, DEVITRIFIED TOPOPAH SPRING MEMBER OF THE PAI
TUFF.

PUBLISH
DATE
ABSTRACT

May 1987. 78 p.
87/05/00

More than fifty outcrop samples of the Topopah sprin
the paintbrush tuff have been analyzed for their pet
mechanical properties.
GEOLOGY: tuff.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Throckmorton, C.K.

Geological Survey, Denver, CO (USA).

PHOTOGEOLOGIC STUDY OF SMALL-SCALE LINEAR FEATURES N
POTENTIAL NUCLEAR WASTE REPOSITORY SITE AT YUCCA MOUN
SOUTHERN NYE COUNTY, NEVADA.

PUBLISH
DATE
ABSTRACT

1987. 56 p.
87/00/00

Linear features were mapped from 1:2400 scale aerial
of the northern half of the potential underground nu
repository site at Yucca Mountain by means of a Kerr
stereoplotter. To determine if the linear features c
fracture traces observed in the field, stations were
the map where the traces were both abundant and loca
within one unit.

GEOLOGY: fractures.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Pusch, R.; Elestroem, M.; Doergesson, L.
govt

The Swedish Nuclear Fuel and Waste Management Co., (
PIPING AND EROSION PHENOMENA IN SOFT CLAY GELS.

May 1987. 45 p.
87/05/00

The present study has confirmed the conclusions from
investigations of piping and erosion of soft smectit

KEYWORDS	showing that the erodibility can be predicted by com
LOCATION	drag forces exerted by flowing water and the cohesiv
REFERENCE	bond in the gels. GEOLOGY: analytical techniques.
AUTHOR	Adams, J.
TYPE	acad
ORGANIZATION	
TITLE	POSTGLACIAL FAULTING IN EASTERN CANADA.
PUBLISH	Tectonophysics, Elsevier Science Publishing, Amsterd
DATE	89/00/00
ABSTRACT	Describes the nature, faulting and seismic hazard im postglacial faulting in Eastern Canada.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	anne
AUTHOR	Fries, G. (Ecole des Mines, 77-Fontainbleau, France.
TYPE	Sedimentologie).
ORGANIZATION	acad
TITLE	Commission of the European Communities, Luxembourg. POTENTIAL FOR CREATION OF A SALT DOME FOLLOWING DISP RADIOACTIVE WASTE IN A SALT LAYER. VOL.2. GEOLOGY OF (in French)
PUBLISH	1987. 144 p.
DATE	87/00/00
ABSTRACT	The study aims at quantifying the possibility of cre salt dome from a salt layer in which heat-emitting r waste would be buried.
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	Einzinger, R.E.; Woodley, R.E.
TYPE	
ORGANIZATION	Hanford Engineering Development Lab. Richland, WA (U
TITLE	PREDICTING SPENT FUEL OXIDATION STATES IN A TUFF REP
PUBLISH	1987. 22 p.
DATE	87/00/00
ABSTRACT	The oxidation state of the lwr spent fuel in the moi environment of a tuff repository could be a signific
KEYWORDS	
LOCATION	
REFERENCE	in determining it's leaching and dissolution charact GEOLOGY: tuff, leaching.
AUTHOR	Lomenick, T.F.; Russell, J.E.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	PRELIMINARY CREEP AND PILLAR CLOSURE DATA FOR SHALES
PUBLISH	October 1987. 37 p.
DATE	87/10/00
ABSTRACT	The results of fourteen laboratory creep tests on mo of four different shales are reported.
KEYWORDS	GEOLOGY: shale.
LOCATION	
REFERENCE	
AUTHOR	Krumhansl, J.L.; Stein, C.L. (Sandia National Labs.,

TYPE	NM).
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	PRELIMINARY REPORT ON WIPP BRINE COMPOSITIONS.
PUBLISH	Proceedings of Salt Repository Project's Workshop in Migration. March 1987, p. 9-11, Appendix/C.68-C.68.
DATE	87/03/00
ABSTRACT	The authors present analyses of macro- and microscopically observed within the WIPP facility and in the surroundings with interpretations regarding the origin and history of fluids and their potential effects on long-term waste GEOLOGY: salt.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv
ORGANIZATION	Berkeley Hydrotechnique, Inc., Berkeley, CA (USA).
TITLE	PROCEEDINGS OF THE FIRST HYDROLOGY WORKSHOP FOR SHALE
PUBLISH	
DATE	86/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: hydrology.
LOCATION	
REFERENCE	
AUTHOR	Langkopf, B.S.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	PROPOSED PRELIMINARY DEFINITION OF THE DISTURBED ZONE APPROPRIATE FOR A REPOSITORY AT YUCCA MOUNTAIN.
PUBLISH	December 1987. 112 p.
DATE	87/12/00
ABSTRACT	Some of the calculations that support the licensing of a repository for high-level radioactive waste will use the regulatory concept of a disturbed zone. This paper summarizes results of computer analyses and laboratory experiments which suggest a preliminary definition for the boundary of a disturbed zone for the unsaturated environment at Yucca Mountain. GEOLOGY: regulations.
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Eckert, J.L.; Kalia, H.N.; Coyle, A.J.
TYPE	
ORGANIZATION	Battelle Memorial Institute., Hereford, TX (USA). Office of Nuclear Waste Isolation.
TITLE	QUARTERLY BRINE MIGRATION DATA REPORT, JULY- SEPTEMBER NUCLEAR WASTE REPOSITORY SIMULATION EXPERIMENTS (BRINE MIGRATION), ASSESSMENT OF THE FEDERAL REPUBLIC OF GERMANY November 1987, 265 p.
PUBLISH	
DATE	87/11/00
ABSTRACT	The purpose of this report is to provide field test results to various analysts and to refine and support numerical models of brine migration, room closure, and other thermomechanical behaviors of salt subjected to heat and gamma radiation. GEOLOGY: thermodynamics, salt.
KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Krauskopf, K.B. (Stanford Univ., CA) acad RADIOACTIVE WASTE DISPOSAL AND GEOLOGY. London, UK. Chapman and Hall. 1988. 157 p. Topics in Sciences Series. V.1. 88/00/00 An introduction to the geology of radioactive waste presented with an emphasis on high-level waste from Chapters included cover the temporary storage of rad wastes, underground and marine disposal, the selecti repository sites, and the development of predictive Social and political aspects and world-wide problems radioactive waste are presented. GEOLOGY: marine disposal, geologic disposal, siting,
KEYWORDS LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION	Burnell, J.R.; Coles, D.G. (Battelle Pacific Northwe Richland, WA) Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	RADIONUCLIDE INJECTION EXPERIMENTS FOR TESTING THE R
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	CAPACITY OF BASALT IN NUCLEAR WASTE REPOSITORY STUDI P. 48-49. Chemistry and Migration Behavior of Actini Fission Products in the Geosphere. Abstracts. 1987. 87/00/00 Published in summary form only. GEOLOGY:
AUTHOR TYPE ORGANIZATION TITLE	Lemire, A.E. Gascoyne, M. govt Atomic Energy of Canada Limited. RADON, RADIUM, AND OTHER RADIOACTIVITY IN GROUND WAT HYDROGEOLOGIC IMPACT AND APPLICATION TO INDOOR AIRBO CONTAMINATION. NATURAL RADIOACTIVITY IN SOME GROUNDW CANADIAN SHIELD.
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	14 p. (1987). Reprinted from Proceedings of the NWWA Somerset, New Jersey, p. 97-110, 1987. 87/00/00 GEOLOGY: groundwater.
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT	Borns, D.J. govt Sandia National Lab. NM (USA). RATES OF EVAPORITE DEFORMATION: THE ROLE OF PRESSURE July 1987. 43 p. 87/07/00 Evaporite sequences were studied for hazardous waste hydrocarbon development and storage. Rates of deform important in evaluating the long term performance of evaporites. Rates are controlled by temperature, dif stress, and active mechanism of deformation for each type of evaporite and setting.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY:

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

Lappin, A.R.

govt

Sandia National Lab. NM (USA).

RECENT DEVELOPMENTS IN THE CONCEPTUAL GEOLOGIC AND
UNDERSTANDING OF THE WIPP SITE, SOUTHEASTERN NEW ME
P. 255-260. Waste Management '87: Waste Isolation in
Technical Programs, and Public Education. Tucson, A
of Arizona Nuclear Engineering Dept. 1987.

87/00/00

Hydrologic and geochemical characterization of the W
progressed significantly since the 1980 WIPP final E
Impact Statement. Recent analyses indicate that fluid

KEYWORDS
LOCATION
REFERENCE

encountered in the WIPP facility and in experimental
brine-migration studies are grain-boundary fluids, c
distinct from fluid inclusions.

GEOLOGY: geologic disposal, hydrology, chemistry.

AUTHOR

Fabryka-Martin, J.T.; Roman, D.; Airey, P.L.; Elmore
P.W.; Come, B. (CEC); Chapman, N.A. (BGS).

TYPE
ORGANIZATION
TITLE

Commission of the European Communities, Luxembourg.
REDISTRIBUTION OF NATURAL 129I AMONG MINERAL PHASES
WATER IN THE KOONGARRA URANIUM DEPOSIT, N.T., AUSTRA
P. 374-385. Natural Analogues in Radioactive Waste D
Proceedings of a Symposium Organized by the CEC and
Brussels, BE, on 28-30 April 1987. London. Graham an
1987. 506 p. Radioactive Waste Management Series.

DATE
ABSTRACT

87/04/00

Redistribution of fission-product 129I between ore a
groundwater is being evaluated in field studies at f
ore deposits.

GEOLOGY: groundwater.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Wilkberg, P. (Royal Inst. of Tech., Stockholm, Swede
acad

Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communities,
(Belgium).

TITLE
PUBLISH

REDOX CONDITIONS OF THE GROUNDWATER-ROCK SYSTEM.
P. 114-115. Chemistry and Migration Behavior of Acti
Fission Products in the Geosphere. Abstracts. 1987.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

87/00/00

Published in summary form only.

GEOLOGY: groundwater.

AUTHOR
TYPE
ORGANIZATION

acad/priv

Earth Technology Corp. Long Beach, CA; Battelle Memo
Columbus, OH. Office of Nuclear Waste Isolation.

TITLE

REGIONAL GROUNDWATER FLOW NEAR RICHTON AND CYPRESS C
MISSISSIPPI: ANNUAL STATUS REPORT FOR FISCAL YEAR 19

PUBLISH
DATE
ABSTRACT

June 1987. 260 p.

87/06/00

The reported work is part of an ongoing evaluation of Cypress salt domes, located in Perry County, as potential repositories for high-level nuclear waste. This report is the refinement of previously developed conceptual and mathematical models of regional groundwater flow in the vicinity

KEYWORDS
LOCATION
REFERENCE

domes, based on extensive evaluation of all available data and on application of a computer flow code.
GEOLOGY: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Vaniman, D. (comp.)

govt

Los Alamos National Lab. NM (USA).

RESEARCH BY ESS DIVISION FOR THE NEVADA NUCLEAR WASTE INVESTIGATIONS: PROGRESS REPORT, JANUARY-JUNE 1985.

PUBLISH
DATE
ABSTRACT

October 1987. 53 p.

87/10/00

Petrographic research for the Nevada Nuclear Waste Site Investigations focused on xenolithic variability in the Spring member and on variations of clinoptilolite in the Yucca Mountain.

GEOLOGY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Pri, J. (Netherlands Energy Research Foundation, Net Post, R.G. (ed.)

PUBLISH

RESULTS OF THE THERMOMECHANICAL EXPERIMENTS PERFORMED IN THE ASSE SALT MINE. (FRG)

P. 187-192. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.

DATE
ABSTRACT

87/00/00

Directly after the drilling operation in Dec. 1979 a thermo-mechanical experiments started. Convergence was measured under isothermal and nonisothermal conditions. The induced pressure of the salt on a cylinder, simulated in a canister, was measured for several thermal loads.

GEOLOGY: thermodynamics, salt.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Gauthier, Michel (Department of Earth Sciences, Faculty of Geology, University of Quebec at Montreal)

acad

Memphramagog Conservation, Inc. (Canada).

RESUME GEOLOGIQUE DU NORD DU VERMONT ET DU SUD DU QU

French).

MCI, Magog, Quebec, 1986

PUBLISH
DATE
ABSTRACT

86/00/00

Northern Vermont and southern Quebec are unsuitable geological siting criteria of the U.S. Department of a nuclear waste repository. The area is tectonically and cross-cut with major fault lines. The St. Lawrence

KEYWORDS	is one of North America's high-risk seismic zones, a
LOCATION	Vermont granites are at the heart of an earthquake 2
REFERENCE	GEOLOGY: MCI, R.R.2, Chemin Southiere, Magog, Quebec J1X 3W3 anne
AUTHOR	Offermann, P. (Hahn-Meitner Inst. Berlin G.M.B.H., G F,.R.); Bidoglio, G. (Commission of the European Com
TYPE	Ispra, Italy)
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. 1 Radiochemie; Commission of the European Communities, (Belgium).
TITLE	RETENTION PROPERTIES OF PRESSED SALT FOR TC, NP, PU,
PUBLISH	P. 127-128. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	GEOLOGY: salt.
LOCATION	
REFERENCE	
AUTHOR	Olsson, W.A.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	ROCK JOINT COMPLIANCE STUDIES.
PUBLISH	April 1987. 98 p.
DATE	87/04/00
ABSTRACT	This report has three objectives: 1) to summarize th developmental investigations of the rotary shear tes rock joint compliance studies, including a descripti rotary shear machine and sample preparation techniqu set out and discuss the required constitutive data, to interpret and analyze the shear compliance data f type of test, and 3) to give some examples and preli for Topopah spring tuff.
KEYWORDS	GEOLOGY: tuff.
LOCATION	
REFERENCE	
AUTHOR	Holt, R.M.; Powers, D.W. (IT Corp., Albuquerque, NM) Chaturvedi, L. (ed.).
TYPE	priv
ORGANIZATION	New Mexico Health and Environment Dept., Santa Fe, U Environmental Evaluation Group.
TITLE	RUSTLER FORMATION IN THE WASTE HANDLING AND EXHAUST SITE, SOUTHEASTERN NEW MEXICO.
PUBLISH	P. 26-35. The Rustler Formation at the WIPP Site: Re Workshop on the Geology and Hydrology of the Rustler as it Relates to the WIPP project. Febuary 1987.
DATE	87/02/00
ABSTRACT	Data are reported here in their stratigraphic contex

|initial basis for evaluation of depositional environ

KEYWORDS
LOCATION
REFERENCE

Rustler and reevaluating the role of dissolution in formation of the Rustler.
GEOLOGY:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Gascoyne, M.; Davison, C.C.; Ross, J.D.; Pearson, R.
govt
Atomic Energy of Canada Limited.
SALINE GROUNDWATERS AND BRINES IN PLUTONS IN THE CAN
16 p. (1987). Reprinted from Saline Water and Gases
Crystalline Rocks, p. 53-68, 1987.
87/00/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

GEOLOGY: groundwater.

AUTHOR
TYPE
ORGANIZATION

govt
Battelle Memorial Institute. OH (USA). Office of Nuc
Isolation.
SALT DISSOLUTION AND COLLAPSE AT THE WINK SINK IN WE
June 1986.

TITLE
PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

86/00/00

GEOLOGY: salt.

AUTHOR
TYPE
ORGANIZATION
TITLE

Haberman, J.H.; Westerman, R.E.
priv
Pacific Northwest Lab. WA (USA).
SALT REPOSITORY PROJECT: DATA REPORT ON CORROSION RE
OBTAINED FROM EXCESS-SALT CORROSION TEST MATRIX 1.
May 1987. 12 p.

PUBLISH
DATE
ABSTRACT

87/05/00

The test discussed in this data report was directed
determining the response of the reference a216 grade
when it is exposed to anoxic excess-salt conditions
GEOLOGY: salt, corrosion.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Rai, D.; Schramke, J.A.; Ryan, J.L.
priv
Pacific Northwest Lab. WA (USA).
SALT REPOSITORY PROJECT: DATA REPORT ON SOLUBILITY O
May 1987. 21 p.
87/05/00
This data report details the experiments conducted t

KEYWORDS
LOCATION
REFERENCE

the solubility of $\text{PU}(\text{OH})_3$ in brines and in dilute so
GEOLOGY: salt, groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Talbot, C.J.; Jackson, M.P.A.

SALT TECTONICS.
Science (Washington, DC). 1988. P. 70-79.

DATE
ABSTRACT

88/00/00

Salt deposits have economic significance because of importance as oil and gas traps and their potential radioactive waste disposal sites. This article reviews formation of salt domes. Current work on tectonics and related tectonics is then discussed in GEOLOGY: salt.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Aoki, H.; Kosaka, T.; Mizushima, T.; Shimizu, M. (Tokyo. Nuclear Facilities Eng. Dept.); Uji, S. (Tokyo. Information System Dept.); Tsuchiya, H. (Yokohama, Japan)
Wittmann, F.H. (ed.).

TYPE
ORGANIZATION
TITLE

SEISMIC BEHAVIOR ANALYSIS OF PILED DRUMS. (INTERIM FACILITIES).

PUBLISH

P.1141-1146. Transactions of the 9th International Structural Mechanics in Reactor Technology. Vol. K2. Response Analysis of Nuclear Power Plant Systems. Rotterdam. Balkema. 1987. 669 p.

DATE
ABSTRACT

87/00/00

A computer program of piled drum's dynamic motion is the analytical result is referred to the experimental GEOLOGY: seismic.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Wu, C.L.; Subramanian, C.V.

PUBLISH
DATE
ABSTRACT

SEISMIC DESIGN STRATEGY FOR SURFACE FACILITIES AT THE YUCCA MOUNTAIN NUCLEAR WASTE REPOSITORY.

Trans. Am. Nucl. Soc. 1987. V. 54 P. 66.

87/00/00

Seismic considerations pertinent to the design of the facilities consist of ground motion generated by both earthquakes and underground nuclear explosions which conducted periodically in the nearby Nevada test site. In addition, because of the presence of a number of potential

KEYWORDS
LOCATION
REFERENCE

active faults in the vicinity of the surface facilities it may be prudent to design the waste-handling buildings to accomodate minor fault displacement.
GEOLOGY: seismic.

AUTHOR

Acharya, H.R.; Tyralla, L.M.; Gonzales, J.M.; Hileman and Webster Engineering Corp., Boston, MA)
Post, R.G. (ed.)
priv

TYPE
ORGANIZATION
TITLE
PUBLISH

SEISMICITY OF TEXAS PANHANDLE.

P. 193-200. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.

DATE
ABSTRACT

87/00/00

Seismicity of the Texas Panhandle has been examined the earthquake hazard at a potential site for a high

KEYWORDS	nuclear waste repository in the Palo Duro basin.
LOCATION	GEOLOGY: seismic.
REFERENCE	
AUTHOR	Ehgartner, B.L.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	SENSITIVITY ANALYSES OF UNDERGROUND DRIFT TEMPERATUR AND SAFETY FACTORS TO VARIATION IN THE ROCK MASS PRO TUFF FOR A NUCLEAR WASTE REPOSITORY LOCATED AT YUCCA NEVADA. (HORIZONTAL EMPLACEMENT DRIFT)
PUBLISH	May 1987. 48 p.
DATE	87/05/00
ABSTRACT	Preliminary two-dimensional thermal and thermal/mech sensitivity analyses of the design of the horizontal drift were performed for times out to 100 years afte emplacement.
KEYWORDS	GEOLOGY: thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Gilliam, T.M.; Morgan, I.L
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	SHALE: MEASUREMENT OF THERMAL PROPERTIES.
PUBLISH	July 1987. 135 p.
DATE	87/07/00
ABSTRACT	Thermal conductivity and heat capacity measurements samples of devonian shale, pierre shale, and oil sha Green River formation. Thermal expansion measurement on selected samples of devonian shale. Average value thermal conductivity and heat capacity for the sampl
KEYWORDS	were within two standard deviations.
LOCATION	GEOLOGY: analytical techniques.
REFERENCE	
AUTHOR	Heimann, R.B.; Stanchell, M.A.T.; Hooton, R.D.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	SHORT-TERM DISSOLUTION EXPERIMENTS ON VARIOUS CEMENT IN STANDARD CANADIAN SHIELD SALINE SOLUTION IN THE P CLAY.
PUBLISH	1986. 74 p.
DATE	86/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: cement, clay.
LOCATION	
REFERENCE	
AUTHOR	Jenkins, C.F.; Corbett, R.A.
TYPE	priv
ORGANIZATION	Savannah River Lab. SC; Corrosion Testing Lab., Inc. (DE).
TITLE	SOIL CHARACTERISTICS AS CRITERIA FOR CATHODIC PROTEC NUCLEAR FUEL PRODUCTION FACILITY.
PUBLISH	1987. 26 p.
DATE	87/00/00
ABSTRACT	The fact that buried, metallic structures corrode is documented. It has been postulated that the extent a

KEYWORDS	attack is controlled predominantly by the character
LOCATION	surrounding soil.
REFERENCE	GEOLOGY: corrosion.
AUTHOR	Drumm, E.C.
TYPE	acad
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	SOIL MECHANICS AND ANALYSIS OF SOILS OVERLYING CAVI
PUBLISH	Aug. 1987. 87 p.
DATE	87/08/00
ABSTRACT	The stability of the residual soils existing at the Ridge site, Oak Ridge, was evaluated with respect to and collapse of the residual soil into the bedrock results and their implications are discussed.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Vovk, I.F. (International Atomic Energy Agency, Vien
	Div. of Nuclear Fuel Cycle)
TYPE	Come, B. (CEC); Chaman, N.A. (BGS).
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	SOME GEOCHEMICAL AND MINERALOGICAL PECULIARITIES OF
PUBLISH	RADIOACTIVE MATERIALS AS EVIDENCE FOR RADIOLYSIS IN P. 205-216. Natural Analogues in Radioactive Waste I
	Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham ar
DATE	1987. 506 p. Radioactive Waste Management Series.
ABSTRACT	87/04/00 Geochemical and mineralogical features of deposits c materials have been reviewed in a search for the rad effects established in laboratory experiments.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Witherspoon, P.A.; Long. J.C.S.
TYPE	acad
ORGANIZATION	University of California. CA (USA).
TITLE	SOME RECENT DEVELOPMENTS IN UNDERSTANDING THE HYDROL
PUBLISH	FRACTURED ROCKS.
	Rock Mechanics: Proceedings of the 28th US Symposium
DATE	1987. p. 421-432.
ABSTRACT	87/00/00 The authors have established a research program aime characterizing the geometry of the void spaces, usin casts and mercury injection to elucidate details of geometry that result as a fracture closes under stre
KEYWORDS	GEOLOGY: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Dran, J.C. (Centre National de la Recherche Scientif
	France); Petit, J.C.; Menager, M.T. (CEA Centre D'Et
TYPE	Nucleaires de Fontenay-aux-Roses, France); Della Mea
ORGANIZATION	Univ., Italy) govt/acad Technische Univ. Muenchen, Garching, Germany, F.R. I

TITLE	Radiochemie; Commission of the European Communities, (Belgium).
PUBLISH	SORPTION OF ACTINIDE ANALOGUES ON GRANITE MINERALS S ION BEAM TECHNIQUES.
DATE	P. 67-68. Chemistry and Migration Behavior of Actini
ABSTRACT	Fission Products in the Geosphere. Abstracts. 1987.
KEYWORDS	87/00/00
LOCATION	Published in summary form only.
REFERENCE	GEOLOGY: radionuclide migration.
AUTHOR	Lambert, S.J. (Sandia National Labs., Albuerque, NM
TYPE	Chaturvedi, L. (ed.). govt

ORGANIZATION	New Mexico Health and Environment Dept., Santa Fe, U
TITLE	Environmental Evaluation Group.
PUBLISH	STABLE-ISOTOPE STUDIES OF GROUNDWATERS IN SOUTHEASTE MEXICO.
DATE	P. 36-57. The Rustler Formation at the WIPP Site: Re
ABSTRACT	Workshop on the Geology and Hydrology of the Rustler as it Relates to the WIPP project. Febuary 1987.
KEYWORDS	87/02/00
LOCATION	Oxygen and deuterium/hydrogen ratio measurements hav
REFERENCE	on groundwaters sampled according to specific field applied during pump tests of the Rustler Formation.
	GEOLOGY: groundwater.

AUTHOR	govt
TYPE	Nuclear Waste Project Office, State of Nevada Agency
ORGANIZATION	Projects. (USA).
TITLE	STATE OF NEVADA COMMENTS ON THE U.S. DOE CONSULTATIO CHARACTERIZATION PLAN, YUCCA MOUNTAIN SITE, NEVADA R
PUBLISH	DEVELOPMENT AREA, NEVADA, VOL 2.
DATE	NWPO. Carson City, Sept.1988, 246pp.
ABSTRACT	88/09/00
KEYWORDS	Continues comments from Vol.1. Contains technical c
LOCATION	geology and geohydrology of Yucca Mountain relating
REFERENCE	raised in the DOE's Draft Site Characterization Plan
	key technical issues must be resolved, including mec
	rates of flow in the unsaturated zone, rates and loc
	recharge, validity of models to be used in calculati
	repository performance, geochemical environment.
	GEOLOGY: hydrogeology, modelling.
	Capitol Complex, Carson City, Nevada 89710
	NFW 2.2-42-1

AUTHOR	Bachman, G.O. (Sandia National Labs, Albuquerque, NM
TYPE	Chaturvedi, L. (ed.).
ORGANIZATION	govt
TITLE	New Mexico Health and Environment Dept. Santa Fe, US
PUBLISH	Environmental Evaluation Group.
DATE	STRATIGRAPHY AND DISSOLUTION OF THE RUSTLER FORMATIO
ABSTRACT	P. 16-25. The Rustler Formation at the WIPP Site: Re
	Workshop on the Geology and Hydrology of the Rustler
	as it Relates to the WIPP project. Febuary 1987.
	87/02/00
	This report describes the physical stratigraphy of t

KEYWORDS
LOCATION
REFERENCE

Formation, because the WIPP will be constructed in
that underlie this formation.
GEOLOGY: salt.

AUTHOR
TYPE
ORGANIZATION
TITLE

Haimson, B.C. (Univ. of Wisconsin, Madison, WI).
acad

PUBLISH

STRESS MEASUREMENTS AT HANFORD, WASHINGTON FOR THE
NUCLEAR WASTE REPOSITORY FACILITY.
P. 119-124. Proceedings of the 6th International Cor
Mechanics. Accord, MA. Balkema Pub. 1987.

DATE

87/00/00

ABSTRACT

This paper summarises the first complete hydrofractur
measurements at the Hanford site in one of the basal
considered for the construction of a nuclear waste
GEOLOGY: basalt.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Haase, C.S.; Gillis, G.A.; King, H.L.
govt

PUBLISH

Oak Ridge National Lab. WA (USA).
SUBSURFACE DATA BASE FOR BEAR CREEK VALLEY, CHESTNUT
PARTS OF BETHEL VALLEY ON THE US DEPARTMENT OF ENERG
RESERVATION.

DATE

April 1987. 178 p.

ABSTRACT

87/04/00

Construction data and available hydrogeological data
boreholes and wells at the y-12 plant and in the sur
vicinity have been assembled and tabulated in a data
GEOLOGY:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Zimmerman, R.M.; Finley, R.E.
govt

PUBLISH

Sandia National Lab. NM (USA).
SUMMARY OF GEOCHEMICAL MEASUREMENTS TAKEN IN AND ARO
G-TUNNEL UNDERGROUND FACILITY, NTS.

DATE

May 1987. 153 p.

ABSTRACT

87/05/00

A summary of field and supporting laboratory data co
and around the g-tunnel underground facility on the
site is presented to provide information concerning
of tuffs to contain radioactive wastes.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: tuff, containment.

AUTHOR
TYPE
ORGANIZATION
TITLE

Jones, G.M.; Blackey, M.E.; Rice, J.E.; Murphy, V.J.
E.N.; Fisk, P.S.; Bromery, R.W.
priv/govt

Weston Geophysical Corp. MA (USA).; Nuclear Regulator
Commission, Washington DC (USA).

SURVEY OF GEOPHYSICAL TECHNIQUES FOR SITE CHARACTERI
BASALT, SALT AND TUFF.

PUBLISH	July 1987. 147 p.
DATE	87/06/00
ABSTRACT	Geophysical techniques may help determine the nature of faulting in the target areas, along with structural information that would be relevant to questions concerning future integrity of a high-level waste repository.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Gove, H.E. (Rochester Univ., NY. Nuclear Structure R
TYPE	acad
ORGANIZATION	
TITLE	TANDEM-ACCELERATOR MASS-SPECTROMETRY MEASUREMENTS OF AND OSMIUM ISOTOPES IN DIVERSE NATURAL SAMPLES.
PUBLISH	Philos. Trans. R. Soc. Lond., Ser. A. 25 August 1987
DATE	P. 103-119.
ABSTRACT	87/08/25 Tandem AMS measurements at Rochester in the past few mainly involved the radioisotopes ³⁶ Cl and ¹²⁹ I, and on ¹⁰ Be, in a variety of terrestrial and extraterrestrial samples.
KEYWORDS	GEOLOGY: natural analogues.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv
ORGANIZATION	URS/JOHN A. Blume and Associates, Engineers, CA (USA
TITLE	TECHNICAL BASIS AND PARAMETRIC STUDY OF GROUND MOTION RUPTURE HAZARD EVALUATIONS AT YUCCA MOUNTAIN, NEVADA
PUBLISH	Sept. 1987. 101 p.
DATE	87/09/00
ABSTRACT	The hazards of ground motion and primary fault rupture Mountain, were evaluated for earthquake occurrence models consisting of faults and background seismicity. This investigation estimated seismic hazard sensitivity to parameters.
KEYWORDS	GEOLOGY: seismic.
LOCATION	
REFERENCE	
AUTHOR	Wilkins, B.J.S.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	TECHNICAL NOTE. THE LONG-TERM STRENGTH OF PLUTONIC ROCK
PUBLISH	Reprinted from International Journal of Rock Mechanics Sciences and Geomechanics Abstracts (1987) 24(6):379
DATE	87/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: granite.
LOCATION	

REFERENCE

AUTHOR	Curtis, D.B.; Capis, J.H.; Perrin, R.E.; Rokop, D.J. National Lab, NM); Fabryka-Martin, J. (Arizona Univ. Dept. of Hydrology and Water Resources); Come, B. (Chapman, N.A. (BGS).
TYPE	govt/acad
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	THE GEOCHEMISTRY OF NATURAL TECHNETIUM AND PLUTONIUM
PUBLISH	P. 354-355. Natural Analogues in Radioactive Waste I Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham ar 1987. 506 p. Radioactive Waste Management Series.
DATE	87/00/00
ABSTRACT	Determination of the abundances of 99TC, 239PU, and provide a useful tool for studying aspects of the ch geologic environments during the last million years.
KEYWORDS	GEOLOGY: chemistry.
LOCATION	
REFERENCE	
AUTHOR	Borns, D.J.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	THE GEOLOGIC STRUCTURES OBSERVED IN DRILLHOLE DOE-2 POSSIBLE ORIGINS: WASTE ISOLATION PILOT PLANT.
PUBLISH	July 1987. 28 p.
DATE	87/07/00
ABSTRACT	Questions remain as the origins of evaporite deforma the Salado and Castile formations. Two miles north o site, a stacked sequence of depressions was indicate boreholes. Such structures raise questions regarding dissolution and gravity tectonics at the WIPP site.
KEYWORDS	GEOLOGY: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Black, J.H.; Noy, D.J.; Brightman, M.A.;
TYPE	assoc
ORGANIZATION	Commision of the European Communities, Luxembourg.
TITLE	THE MEASUREMENT OF THE VERTICAL COMPONENT OF HYDRAUL CONDUCTIVITY IN SINGLE-CASED AND UNCASD BOREHOLES.
PUBLISH	1987. 67 p.
DATE	87/00/00
ABSTRACT	The project aimed to assess the different existing m measuring vertical hydraulic conductivity in single carrying out some actual field testing. A review of techniques for both field practice and analysis of t is reported.
KEYWORDS	GEOLOGY:
LOCATION	
REFERENCE	
AUTHOR	Chaturvedi, L. (ed.)
TYPE	govt
ORGANIZATION	New Mexico Health and Environment Dept., Santa Fe, U Environmental Evaluation Group.
TITLE	THE RUSTLER FORMATION AT THE WIPP SITE: REPORT OF A THE GEOLOGY AND HYDROLOGY OF THE RUSTLER FORMATION A TO THE WIPP PROJECT.
PUBLISH	February 1987. 80 p.
DATE	87/02/00
ABSTRACT	This workshop contained eight papers characterizing

KEYWORDS	Formation at the WIPP site.
LOCATION	GEOLOGY: groundwater, salt, radionuclide migration.
REFERENCE	
AUTHOR	Kimball, J.K.; Jackson, R.E.; Jelacic, A.J.; Rhoderi F. Weston, Inc., Washington, DC)
TYPE	Post, R.G. (ed.)
ORGANIZATION	priv
TITLE	THE SIGNIFICANCE OF TECTONIC EVENTS AND PROCESSES ON LONG-TERM ISOLATION OF HIGH-LEVEL RADIOACTIVE WASTES
PUBLISH	P. 147-152. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	The development of tectonic scenarios for a high-level radioactive waste repository will depend on both the of occurrence of a tectonic event and the relationship the tectonic event and those factors which may be in assessing repository performance.
KEYWORDS	GEOLOGY: seismic.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Nuclear Waste Project Office, State of Nevada, Agency Projects.(USA).
TITLE	THE STATE OF NEVADA'S GEOTECHNICAL CONCERNS AT THE P MOUNTAIN HIGH-LEVEL WASTE REPOSITORY SITE - AN OVERVIEW
PUBLISH	NWPO, Carson City,
DATE	00/00/00
ABSTRACT	Nevada geologists and engineers have identified a set of extremely complex issues to be addressed in characterizing the Yucca Mountain site for a nuclear waste repository. cases, available knowledge of geohydrological processes sufficient to fully understand and resolve these issues. nature of the repository program requires that the geological characteristics of the site constitute the primary basis for waste migration. Generalized models of groundwater
KEYWORDS	acceptable for predicting repository performance.
LOCATION	GEOLOGY: hydrogeology.
REFERENCE	Capitol Complex, Carson City, Nevada 89710
AUTHOR	anne
TYPE	
ORGANIZATION	
TITLE	Morner, Nils-Axel
PUBLISH	acad
DATE	Paleogeophysics and Geodynamics, Geologiska Institutet University of Stockholm. (Sweden).
ABSTRACT	THE SWEDISH FAILURE IN DEFINING AN ACCEPTABLE BEDROCK FOR NUCLEAR WASTE DEPOSITION.
KEYWORDS	Geologiska Foreningens i Stockholm Forhandlingar, Stockholm, April, 1989, 8pp.
LOCATION	89/04/15
REFERENCE	Observational data of crystalline bedrock in Sweden significant earth movements of recent (post-glacial) evidence should preclude the concept of deep geological containment of nuclear waste.
KEYWORDS	GEOLOGY: crystalline, geologic disposal.
LOCATION	Stockholm University, 10691 Stockholm, Sweden

REFERENCE

anne

AUTHOR
TYPE
ORGANIZATION
TITLE

Wayland, J.R.; Lee, D.O.
govt
Sandia National Lab. NM (USA).
THEORETICAL DEVELOPMENT FOR THE MAPPING OF MOISTURE
HEATED BLOCK EXPERIMENT.

PUBLISH
DATE
ABSTRACT

February 1987. 50 p.
87/02/00
Mathematical expressions are developed for utilization
analysis of field data. Expressions are given for an
zones and for layer earth models bounded on four sides
reflecting planes. The purpose of this document is to
for those knowledgeable in electromagnetic theory, to
background to extend the buried electrode concept to
applications.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: modelling.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Orlander, D.; Machiels, A.; Yagnik, S. (Univ. of Cal
Berkely).

DATE
ABSTRACT

acad
Pacific Northwest Lab. WA (USA).
THERMAL GRADIENT MIGRATION OF BRINE INCLUSIONS IN SA
Proceedings of Salt Repository Project's Workshop on
Migration. March 1987, p. 24-25, Appendix/C. 75-C.82
87/03/00

An apparatus was used to measure velocities of inclu
synthetic single crystals (NaCl and KCl) and in natu
salt under various conditions of temperature gradien
uniaxial stress.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: thermodynamics, salt.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Durham, W.B.; Heard, H.C.; Boro, C.O.; Keller, K.T.;
Trimmer, D.A.

govt
Lawrence Livermore National Lab. CA (USA); Battelle
Inst. Columbus, OH (USA).
THERMAL PROPERTIES OF PERMIAN BASIN EVAPORITES TO 49
TEMPERATURE AND 30 MPA CONFINING PRESSURE.

Mar 1987. 85 p.

87/03/00

Laboratory measurements of the thermal conductivity
diffusivity of four rock salts, two anhydrites, and
dolomites bordering cycle 4 and cycle 5 bedded salt
in the Permian basin in Deaf Smith County, Texas, we
GEOLOGY: thermodynamics.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Ohnishi, Y.; Kobayashi, A.; Nishigaki, M. (Kyoto Uni
acad

PUBLISH
DATE

THERMO-HYDRO-MECHANICAL BEHAVIOR OF ROCKS AROUND AN
OPENING.

P. 207-210. Proceedings of the 6th International Con
Mechanics. Accord, MA (USA). A.A. Balkema Publishers
87/00/00

ABSTRACT	This paper describes the coupled thermo-hydro-mechan analytical method with application to the Stripa pro buffer mass test and the macropermeability experimen to evaluate the capability of the method.
KEYWORDS	GEOLOGY: buffers.
LOCATION	
REFERENCE	
AUTHOR	Holloway, A.L.; Soonawala, N.M.; Collett, L.S.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THREE-DIMENSIONAL FRACTURE MAPPING IN GRANITE EXCAVA GROUND-PENETRATING RADAR.
PUBLISH	Reprinted from CIM Bulletin (December 1986) 79(896):
DATE	86/12/00
ABSTRACT	
KEYWORDS	GEOLOGY: granite.
LOCATION	
REFERENCE	
AUTHOR	Kawamura, R. (Japan Information Service, Ltd., Toky
TYPE	priv
ORGANIZATION	
TITLE	THREE-DIMENSIONAL GROUNDWATER FLOW AND ADVECTION DIF FOR TREATING DECAY CHAIN OF RADIOACTIVE MATERIALS BY ELEMENT METHOD.
PUBLISH	J. Nucl. Sci. Technol. (Tokyo) (Nov. 1987). V. 24(11
DATE	87/11/00
ABSTRACT	The present work should permit accurate estimation o and diffusion behavior to be expected of high- and l radioactive wastes in geological formations of compl
KEYWORDS	GEOLOGY: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Wilkins, B.J.S.; Liner, Y.; Rigby, G.L.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	TIME-DEPENDENT MICROCRACKING IN PLUTONIC ROCK DUE TO NUCLEAR-FUEL WASTE VAULT.
PUBLISH	1985. 8 p. Proceedings of the 26th U.S. Symposium on Mechanics, South Dakota School of Mines and Technolo City, SD, p. 479-486, 26-28 June 1985.
DATE	85/00/00
ABSTRACT	
KEYWORDS	GEOLOGY: thermodynamics, granite.
LOCATION	
REFERENCE	
AUTHOR	Handin, J.
TYPE	acad
ORGANIZATION	Texas A & M Research Foundation. (USA).
TITLE	TRANSIENT CREEP OF REPOSITORY ROCKS, FINAL REPORT: M CREEP LAWS FOR ROCK SALT.
PUBLISH	Battelle Memorial Inst. Report ONWI-550. Sept. 1984.
DATE	84/09/00
ABSTRACT	Transient creep and deformation of rock salt from Av LA, was analyzed. Cores were tested in triaxial comp confining pressures of 3,4 and 20 MPa, temperatures C, and constant strain rates of 10 to the -4, -5, -6 model was developed from the results to predict the

KEYWORDS
LOCATION
REFERENCE

relaxation, constant stress rate, and constant stress
GEOLOGY: modelling.

AUTHOR

McMillan, K.; Cross, R.W.; Long, P.E. (Rockwell Hanford
Operations, Richland, WA)

TYPE
ORGANIZATION
TITLE

TWO-STAGE VESICULATION IN THE COHASSETT FLOW OF THE
BASALT, SOUTH-CENTRAL WASHINGTON.
Geology. September 1987. V.15(9) P. 809-812.

PUBLISH
DATE

87/09/00

ABSTRACT

The cohasset flow in south-central Washington is composed

KEYWORDS
LOCATION
REFERENCE

possible host for a nuclear waste repository at the
and is being investigated as part of the basalt waste
project.

GEOLOGY: basalt.

AUTHOR
TYPE
ORGANIZATION

Rasmussen, T.C.; Evans, D.D. (comps.)
govt/acad

TITLE

Arizona University, Tucson, Dept. of Hydrology and Water
Resources; Nuclear Regulatory Commission, Washington
of Engineering.

PUBLISH
DATE

UNSATURATED FLOW AND TRANSPORT THROUGH FRACTURED ROCK
HIGH-LEVEL WASTE REPOSITORIES: FINAL REPORT. PHASE 2
May 1987. 500 p.

ABSTRACT

87/05/00

In response to high-level waste repository licensing
US regulatory commission, this report examines and provides
insights into physical characteristics and methodological
performance assessment of candidate sites in unsaturated
fractured rock.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: groundwater, fractures.

AUTHOR
TYPE
ORGANIZATION

Ivanovich, M.; Wilkins, M.A.

TITLE

UKAEA Harwell Lab. Chemistry Div.; Department of the
London, (UK).

PUBLISH
DATE

URANIUM SERIES DISEQUILIBRIUM MEASUREMENTS AT MOL, B
WHITESHELL. FINAL COMBINED REPORT.

ABSTRACT

July 1987. 26 p.

87/07/00

Measurements of uranium series disequilibrium in groundwater
derived from sand layers above and below the boom clay
in north east Belgium are analyzed in terms of uranium
and radium isotopic geochemistries, water types, and
mixing in the regional groundwater systems.

KEYWORDS
LOCATION
REFERENCE

GEOLOGY: sand, clay, groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

Peterson, E.W.; Lagus, P.L.; Lie, K.

S-Cubed. La Jolla, CA (USA).

WIPP (WASTE ISOLATION PILOT PLANT) HORIZON FREE FIELD
TRANSPORT CHARACTERISTICS.

PUBLISH
DATE
ABSTRACT

December 1987. 105 p.
87/12/00
This report describes the first attempt to measure t
brine transport characteristics of the host rock. Th
which have been used to estimate the brine permeabil

KEYWORDS
LOCATION
REFERENCE

suggest free field pore pressure values.
GEOLOGY: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION

Saulnier, G.J.Jr.; Freeze, G.A.; Stensrud, W.A.
priv/govt
Intera Technologies, Inc. Austin, TX; Sandia Nationa
(USA).

TITLE

WIPP HYDROLOGY PROGRAM: WASTE ISOLATION PILOT PLANT,
NEW MEXICO: HYDROLOGIC DATA REPORT NO. 4.

PUBLISH
DATE
ABSTRACT

February 1987. 447 p.
87/02/00
Hydrologic data report no. 4 contains descriptions o
aquifer tests conducted by hydro chem in 1984.
GEOLOGY: hydrology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Knauss, K.G. (Lawrence Livermore National Lab., CA).
Bates, J.K.; Seefeldt, W.B. (eds.).
govt
Argonne National Lab. Il (USA).
ZEOLITIZATION OF GLASSY TOPOPAH SPRING TUFF UNDER HY
CONDITIONS.

PUBLISH
DATE
ABSTRACT

P. 737-745. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00
In support of the Nevada Nuclear Waste Storage Inves
Project, experiments were conducted to study the eff
generated by a nuclear waste repository in densely w
devitrified tuff on the underlying, compositionally-
glassy tuff at Yucca Mountain.
GEOLOGY: tuff.

KEYWORDS
LOCATION
REFERENCE

AUTHOR	Elders, W.A. (California Univ., Riverside. Inst. of and Planetary Physics); Come, B. (CEC); Chapman, N.A.
TYPE	acad
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	A NATURAL ANALOGUE FOR NEAR-FIELD BEHAVIOR IN A RADIOACTIVE WASTE REPOSITORY IN SALT: THE SALTON SALT FIELD, CALIFORNIA, USA.
PUBLISH	P. 342-353. Natural Analogues in Radioactive Waste D Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	In the future our data can be also used in validatin assessment codes which couple geochemistry and trans processes, and in design of waste packages and backf compositions.
KEYWORDS	RADIONUCLIDE MIGRATION: salt, natural analogues.
LOCATION	
REFERENCE	

AUTHOR	Alexander, W.R.; MacKenzie, A.B. (Scottish Univ. Res Reactore Center, Glasgow, UK); Scott, R.D.; McKinley (Eidgenoessesches Inst. fuer Reaktorforschung, Wuere Switzerland)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	A NATURAL ANALOGUE STUDY OF RADIONUCLIDE MIGRATION I CONDUCTION FRACTURES IN A CRYSTALLINE ROCK.
PUBLISH	P. 76-77. Chemistry and Migration Behavior of Actini Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: natural analogues, geology.
LOCATION	
REFERENCE	

AUTHOR	Peaudecerf, P.; Jebrak, M.; Lemiere, B.; Sureau, J.F A.M.; Blanc, P.L.; Come, B. (CEC); Chapman, N.A. (BG
TYPE	
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	A QUANTITATIVE APPROACH TO EXCHANGE PHENOMENA BETWEE TEMPERATURE HYDROTHERMAL SOLUTIONS AND GRANITIC ROCK METHODOLOGY AND PRELIMINARY STUDIES IN THE ENTRAYGUE
PUBLISH	P. 442-443. Natural Analogues in Radioactive Waste D Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	A study has been undertaken on fossil geothermal sys to determine the various characteristics of migratio

KEYWORDS	elements analogous to the radionuclides.
LOCATION	RADIONUCLIDE MIGRATION: granite.
REFERENCE	

AUTHOR	Hodgkinson, D.P.; Robinson, P.C.; Tasker, P.W. (UKAE Energy Research Establishment, Harwell)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	A REVIEW OF MODELLING REQUIREMENTS FOR RADIOLOGICAL
PUBLISH	P. 150. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION: modelling.
LOCATION	
REFERENCE	
AUTHOR	Olander, D.R.
TYPE	govt
ORGANIZATION	
TITLE	A STUDY OF THERMAL-GRADIENT-INDUCED MIGRATION OF BRI IN SALT: FINAL REPORT.
PUBLISH	Battelle Memorial Inst. Report ONWI-538. August 1984
DATE	84/08/00
ABSTRACT	The migration of brine inclusion in salt under impos temperature gradients was analyzed to properly evalu performance of a future salt repository for radioact Migration velocities of inclusions were found to be temperature, temperature gradient, and inclusion sha
KEYWORDS	RADIONUCLIDE MIGRATION: salt.
LOCATION	
REFERENCE	
AUTHOR	Hoetzel, H.; Winkler, R.
TYPE	govt
ORGANIZATION	Gesellschaft fuer Strahlen und Umweltforschung (FRG)
TITLE	ACTIVITY CONCENTRATIONS OF 226RA, 228RA, 210PB, 40K, THEIR TEMPORAL VARIATIONS IN SURFACE AIR.
PUBLISH	Journal of Environmental Radioactivity. 1987. V. 5(6
DATE	87/00/00
ABSTRACT	Activity concentrations of the long-lived natural ra 226RA, 228 RA, 40K, and of 7BE, in surface air were twice monthly at a semi-rural location of 10 km nort for at least three years. The contribution of local activity to the air activity concentrations of these radionuclide and of natural uranium is discussed.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	AN ANALOGUE VALIDATION STUDY OF NATURAL RADIONUCLIDE CRYSTALLINE ROCKS USING URANIUM-SERIES DISEQUILIBRIU
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 91.
DATE	85/09/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION: natural analogues.
LOCATION	
REFERENCE	

AUTHOR	Biddle, P.; Rees, J.H.
TYPE	govt
ORGANIZATION	UKAEA Harwell Lab. Chemistry Div.; Department of the London, (UK).
TITLE	AN INITIAL STUDY OF THE BEHAVIOR UNDER REPOSITORY CO INACTIVE COMPONENTS OF NUCLEAR WASTES.
PUBLISH	February 1988. 80 p.
DATE	88/02/00
ABSTRACT	This review extends the appreciation of repository b include the inactive components of wastes and their products. The effect of degradation products on the of long-lived radionuclides and any active daughters sorption on surfaces of the repository are assessed.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

AUTHOR	Carlyle, S.; Ruegger, B.; Thegerstroem, C.; Wanner, Energy Agency, Paris, France)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	AN OVERVIEW OF OECD/NEA ACTIVITIES RELATED TO THE AS RADIONUCLIDE MIGRATION IN THE GEOSPHERE.
PUBLISH	P. 182-183. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

AUTHOR	Thegerstrom, C.; Carlyle, S.; Ruegger, B.; Wanner, H (Organization for Enconomic Co-operation and Develop Energy Agency, Paris, France)
TYPE	assoc
ORGANIZATION	

TITLE	AN OVERVIEW OF OECD/NEA ACTIVITIES RELATED TO THE AS RADIONUCLIDE MIGRATION IN THE GEOSPHERE.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 197-217.
DATE	88/05/00
ABSTRACT	Studies and projects related to the performance asse nuclear waste repositories including the assessment geosphere barrier, constitute a major part of presen activities in the area of radioactive waste manageme
KEYWORDS	RADIONUCLIDE MIGRATION: monitoring, disposal and sto alternatives.
LOCATION	
REFERENCE	

AUTHOR	Come, B. (Commission of the Euroean Communities, Bru Belgium)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	AN OVERVIEW OF THE COMMUNITY PROJECT MIRAGE II (MIGR RADIONUCLIDES IN THE GEOSPHERE, 1985-1989).

PUBLISH	P. 168. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Van Genuchten, M.; Parker, J.C.; Kool, J.B.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	ANALYSIS AND PREDICTIONS OF WATER AND SOLUTE TRANSPORT IN A TUFF LYSIMETER.
PUBLISH	Modelling Study of Solute Transport in the Unsaturated Zone. Workshop Proceedings. April 1987. p. 4-36.
DATE	87/04/00
ABSTRACT	The use of simple deterministic models to describe transport behaviour of crushed Bandelier Tuff in large lysimeters is investigated.
KEYWORDS	RADIONUCLIDE MIGRATION: tuff.
LOCATION	
REFERENCE	
AUTHOR	Apted, M.J.; Liebetrau, A.M.; Engel, D.W.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	ANALYSIS OF SPENT FUEL AS A NUCLEAR WASTE FORM.
PUBLISH	January 1987. 29 p.
DATE	87/01/00
ABSTRACT	The release of radionuclides from spent fuel has been investigated for three different repository sites and waste packaging.
KEYWORDS	RADIONUCLIDE MIGRATION: containment.
LOCATION	
REFERENCE	
AUTHOR	Gureghian, A.B.
TYPE	acad
ORGANIZATION	Battelle Memorial Inst. OH (USA).
TITLE	ANALYTICAL SOLUTIONS FOR MULTIDIMENSIONAL TRANSPORT OF A FOUR-MEMBER RADIONUCLIDE DECAY CHAIN IN GROUND WATER
PUBLISH	Jan 1987. 165 p.
DATE	87/01/00
ABSTRACT	Analytical solutions based on the Laplace and Fourier transformation techniques are presented for the two- and three-dimensional space-time-dependent convective-dispersive transport of a four-member radionuclide decay chain in homogeneous porous media.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Sato, K.; Ito, Y.; Shimizu, T. (Kumagai Gumi Co. Ltd)
TYPE	
ORGANIZATION	
TITLE	APPLIED STUDY ON TRANSFER OF RADIOACTIVE NUCLIDES AND DIFFUSION AROUND RADIOACTIVE WASTE DISPOSAL CAVERN IN A FRACTURED ROCK MASS.
PUBLISH	P. 245-248. Proceedings of the 6th International Conference on Mechanics. Accord, MA (USA). A.A. Balkema Publishers
DATE	87/00/00
ABSTRACT	This paper presents the numerical analysis of the heat transfer and migration behavior of radionuclides in a fractured rock mass.

KEYWORDS
LOCATION
REFERENCE

and nuclide migration around a disposal cavern of ra
wastes in rock mass.
RADIONUCLIDE MIGRATION: geology.

AUTHOR
TYPE
ORGANIZATION
TITLE

Rundberg, R.S.
govt
Los Alamos National Lab. NM (USA).
ASSESSMENT REPORT ON THE KINETICS OF RADIONUCLIDE AD
YUCCA MOUNTAIN TUFF.

PUBLISH
DATE
ABSTRACT

July 1987. 95 p.
87/07/00
The kinetics of sorption was measured by observing t
radionuclides by tuff wafers and crushed tuff as a f
time.

KEYWORDS
LOCATION
REFERENCE

RADIONUCLIDE MIGRATION: tuff.

AUTHOR

Nakayama, S.; Takagi, I.; Higashi, K. (Kyoto Univ.,

TYPE
ORGANIZATION
TITLE

Faculty of Engineering).
acad

PUBLISH
DATE
ABSTRACT

BENCHMARK PROFILES FOR ADVECTION-DISPERSION MIGRATIO
RADIONUCLIDES THROUGH TWO-LAYERED GEOLOGIC MEDIA.
J. Environ. Radioact. 1987. V.5(2) P.87-103.

KEYWORDS
LOCATION
REFERENCE

87/00/00
Concentration profiles are presented for one-dimensi
migration of radionuclides through two-layered geolo
RADIONUCLIDE MIGRATION: geology.

AUTHOR

Kopp, P.; Burkart, W. (Eidgenoessisches Inst. fuer
Reaktorforschung, Wuerenlingen, Switzerland)

TYPE
ORGANIZATION

Technische Univ. Muenchen, Garching, Germany, F.R.;
the European Communities, Brussels, (Belgium).
BIOAVAILABILITY AND UPTAKE OF RADIUM-226 BY PLANTS F
COMPETITION OF ALKALINE EARTH ELEMENTS. (TRANSFER FA
P.101. Chemistry and Migration Behavior of Actinides
Products in the Geosphere. Abstracts. 1987. 196 p.

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

87/00/00
Published in summary form only.
RADIONUCLIDE MIGRATION:

AUTHOR
TYPE
ORGANIZATION
TITLE

Benson, A.B.; Shook, L.
acad

PUBLISH
DATE
ABSTRACT

BLOWING IN THE WIND: RADIOACTIVE CONTAMINATION OF TH
THE HANFORD NUCLEAR RESERVATION.
Hanford Education Action League Report.

KEYWORDS

There is strong, but not conclusive, evidence that c
eastern Washington are suffering serious radioactive
contamination of the soil due to discharges from the
Nuclear Reservation. Testing is called for in this p
RADIONUCLIDE MIGRATION: health, public participation

LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION	priv/govt Westinghouse Electric Corp., PA (USA). Office of Nuc Isolation, (USA).
TITLE	BRINE MIGRATION TEST FOR ASSE MINE, FEDERAL REPUBLIC FINAL DESIGN REPORT.
PUBLISH DATE	August 1987. 315 p. 87/08/00
ABSTRACT	A test designed to simulate the heating and radiatio
KEYWORDS LOCATION REFERENCE	potential repository, and the subsequent effects on b migration, has been implemented at the ASSE site. RADIONUCLIDE MIGRATION: design.
AUTHOR TYPE ORGANIZATION	Dayal, R.; Klein, R.; Jakubick, A.T. (Ontario Hydro, govt Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE PUBLISH	C-14 ATTENUATION IN CEMENTITIOUS BACKFILL MATERIALS. P. 63. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE ABSTRACT KEYWORDS LOCATION REFERENCE	87/00/00 Published in summary form only. RADIONUCLIDE MIGRATION: backfill, cement.
AUTHOR TYPE ORGANIZATION TITLE	Avci, H.I. CALCULATION OF RADIONUCLIDE INVENTORIES IN A NUCLEAR DISPOSAL VAULT WITH LEAKAGE.
PUBLISH DATE ABSTRACT	Trans. Am. Nucl. Soc. 1987. V. 54 P.106-107. 87/00/00 A method has been developed and a small computer pro LDK has been written to calculate the inventories an durations of radionuclides in a nuclear waste dispos when leakage from the vault occurs.
KEYWORDS LOCATION REFERENCE	RADIONUCLIDE MIGRATION: modelling.
AUTHOR TYPE ORGANIZATION TITLE	Commission of European Communities. Luxembourg. CEC COORDINATED PROJECT MIRAGE: MIGRATION OF RADIONU GEOSPHERE.
PUBLISH DATE ABSTRACT	CEC Report EUR 9304 EN. 1984. 66 p. 84/00/00 Radionuclide migration in the biosphere is being stu of the CEC MIRAGE project. Four site-specific monito and associated laboratory work will address the tran radioactivity from conditioned radioactive waste thr different barriers up to the interface between the g the biosphere.
KEYWORDS	RADIONUCLIDE MIGRATION: modelling.

LOCATION
REFERENCE

AUTHOR	Luksic, A.T.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	CHARACTERIZATION OF ACTIVATED METALS IN SPENT FUEL H
PUBLISH	January 1988. 9 p.
DATE	88/01/00
ABSTRACT	The subject of this paper is to describe work that i being done at PNL to measure radionuclide activities activated metals.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Livens, F.R. (Inst. of Terrestrial Ecology, Merlewoo Station, Grange-Over-Sands, UK); Baxter, M.S. (Scott Universities Research and Reactor Center, Glasgow, U
TYPE	acad
ORGANIZATION	
TITLE	CHEMICAL ASSOCIATIONS OF ARTIFICIAL RADIONUCLIDES IN SOILS.
PUBLISH	J. Environ. Radioact. 1988. V.7(1) p. 75-86.
DATE	88/00/00
ABSTRACT	The distributions of radionuclides in the surface la soils of contrasting types from West Cumbria, UK hav studied in detail.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Higgo, J.J.W. (Imperial Coll. of Science and Tech., Of Chemistry)
TYPE	acad
ORGANIZATION	
TITLE	CLAY AS A BARRIER TO RADIONUCLIDE MIGRATION.
PUBLISH	Prog. Nucl. Energy. 1987. V.19(2) P.173-207.
DATE	87/00/00
ABSTRACT	This paper discusses the factors that influene radio mobility in natural clay materials.
KEYWORDS	RADIONUCLIDE MIGRATION: clay.
LOCATION	
REFERENCE	
AUTHOR	Skytte Jensen, B.; Jensen, H.. (Riscoe National Lab. Denmark)
TYPE	govt
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	COMPLEX FORMATION OF RADIONUCLIDES WITH ORGANIC LIGA FOUND IN GROUND WATER.
PUBLISH	P. 133-134. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.

DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Jansen, G.; Cloke, P.L.; Bloom, S.G. (Battelle Memor
TYPE	Columbus, OH)
ORGANIZATION	acad
	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	COUPLING OF THE WASTE PACKAGE SOURCE TERM TO RADIONU
	MIGRATION OF ACTNIDE CHAINS. (GEOCHEMICAL CODE EQ6).
PUBLISH	P. 88-89. Chemistry and Migration Behavior of Actini
	Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Skytte Jensen, B. (Risoe National Lab., Roskilde, De
TYPE	govt
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	DANISH APPROACHES TO THE ASSESSMENT OF RADIONUCLIDE
	THE GEOSPHERE.
PUBLISH	P. 169-170. Chemistry and Migration Behavior of Acti
	Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Rasilainen, K.; Vuori, S. (Valtion Teknillinen Tutki
TYPE	Helsinki, Finland)
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	DESCRIPTION OF VARIOUS MIGRATION PHENOMENA BY EFFECT
	RETARDATION FACTOR.
PUBLISH	P. 85. Chemistry and Migration Behavior of Actinides
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Lanza, E.
TYPE	assoc
ORGANIZATION	CEC Joint Research Centre. (Italy).
TITLE	DEVELOPMENT OF A TEST METHOD FOR LEACHING GLASSES IM

PUBLISH	POROUS MEDIA.
DATE	European Applied Research Report. 1984. V. 5(4) p. 7
ABSTRACT	84/00/00
	A leaching apparatus was developed to evaluate the properties of glass incorporating high-level radioac when embedded in wet porous media.
KEYWORDS	RADIONUCLIDE MIGRATION: leaching, glass.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontarion Hydro. (Canada).
TITLE	DIFFUSION FROM CYLINDRICAL WASTE FORMS.
PUBLISH	1985. 32 p.
DATE	85/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Meier, H.; Zimmerhackl, E.; Hecker, W.; Zietler, G.; (Staatliches Forschungsinstitut fuer Geochemie, Bamberg, Germany, F.R.)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	DIFFUSION MEASUREMENTS OF RADIONUCLIDES IN SEDIMENT
PUBLISH	P. 66. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: geology.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	DIFFUSION OF NEPTUNIUM IN SIMULATED HIGH-LEVEL WASTE
PUBLISH	J. of Nuclear Science & Technology.- Japan, Nov. 198 992-1001.
DATE	86/11/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION: glass.
LOCATION	
REFERENCE	
AUTHOR	Christiansen, B.; Torstenfelt, B. (Chambers Univ., Sweden)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	DIFFUSION OF NICKEL, STRONTIUM, IODINE, CESIUM AND A LOOSELY COMPACTED BENTONITE AT HIGH pH.
PUBLISH	P. 24. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:

LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION TITLE	priv/govt Ontario Hydro. (Canada). DIFFUSION OF RADIONUCLIDES IN NON-METALLIC SOLIDS OF SHAPES.
PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	Chemical Research Department, Ontario Hydro. 1986. 2 86/00/00 RADIONUCLIDE MIGRATION:
AUTHOR TYPE ORGANIZATION TITLE	Light, W.B.; Lee, W.W.L.; Chambre, P.L.; Pigford, T. California, Berkeley). acad EFFECTS OF SORPTION AND DECAY ON STEADY-STATE RADION RELEASE RATES.
PUBLISH DATE ABSTRACT	Trans. Am. Nucl. Soc. 1987. V. 54 P.108-109. 87/00/00 In this paper the authors analyze the effects of equ sorption and radioactive decay on steady-state mass rates from waste packages in nuclear waste repositior
KEYWORDS LOCATION REFERENCE	RADIONUCLIDE MIGRATION: containment.
AUTHOR TYPE ORGANIZATION TITLE	Sheppard, M.I.; Thibault, D.H.; Mitchell, J.H. govt Atomic Energy of Canada Limited. ELEMENT LEACHING AND CAPILLARY RISE IN SANDY SOIL CO EXPERIMENTAL RESULTS.
PUBLISH DATE ABSTRACT	Journal of Environmental Quality (July-Sept. 1987) p. 273-284. This study examines both the leaching and capillary
KEYWORDS LOCATION REFERENCE	I, Np, Cs, Cr, and Mo through a sandy soil. RADIONUCLIDE MIGRATION:
AUTHOR TYPE ORGANIZATION TITLE	Looney, B.B.; Grant, M.W.; King, C.M. govt Savannah River Lab. SC (USA). ESTIMATION OF GEOCHEMICAL PARAMETERS FOR ASSESSING S TRANSPORT AT THE SAVANNAH RIVER PLANT: ENVIRONMENTAL DOCUMENT.
PUBLISH DATE ABSTRACT	March 1987. 74 p. 87/03/00 Geochemical parameter estimates to be used in assess subsurface transport of chemicals from Savannah Rive (SRP) waste sites are presented.
KEYWORDS LOCATION REFERENCE	RADIONUCLIDE MIGRATION: chemistry.
AUTHOR TYPE ORGANIZATION	Addis, R.P. govt Savannah River Lab. SC (USA).

TITLE	EVALUATION OF SAVANNAH RIVER LABORATORY ATMOSPHERIC MODELS.
PUBLISH	1987. 5 p.
DATE	87/00/00
ABSTRACT	The results of 14 daytime mats, conducted in predomi convectively unstable conditions, showed that puff-p simulated the plume width well.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Carleson, T.E.; Drown, D.C.; Hart, R.E.; Peterson, M
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	EVALUATION OF THE TRANSPORT AND RESUSPENSION OF A SI
PUBLISH	NUCLEAR WASTE SLURRY: NUCLEAR WASTE TREATMENT PROGRA
DATE	Sept. 1987. 134 p.
ABSTRACT	87/09/00 Research was conducted on the transport and resuspen simulated high-level nuclear waste slurry.
KEYWORDS	RADIONUCLIDE MIGRATION: chemistry.
LOCATION	
REFERENCE	
AUTHOR	Hofmann, B.; Peters, T.J.; Dearlove, J.P.L.; Lever, Ivanovich, M.; Green, D.C.; Baertschi, P.
TYPE	Come, B. (CEC); Chapman, N.A. (BGS).
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	EVIDENCE OF FOSSIL AND RECENT DIFFUSIVE ELEMENT MIGR
PUBLISH	REDUCTION HALOES FROM PERMIAN RED-BEDS OF NORTHERN S
DATE	P. 217-238. Natural Analogues in Radioactive Waste D
ABSTRACT	Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series.
KEYWORDS	87/04/00 Migration mechanisms and accumulation rates of urani thorium may yield important parameters for safety as modelling for radioactive waste disposal.
LOCATION	RADIONUCLIDE MIGRATION: modelling, geology, safety a
REFERENCE	
AUTHOR	Robinson, P.C.; Hodgkinson, D.P. (UKAEA Atomic Energ
TYPE	Establishment, Harwell. Theoretical Physics Div.).
ORGANIZATION	
TITLE	EXACT SOLUTIONS FOR RADIONUCLIDE TRANSPORT IN THE PR
PUBLISH	PARAMETER UNCERTAINTY.
DATE	Radioact. Waste Manag. Nucl. Fuel Cycle. November 19
ABSTRACT	P. 283-311. 87/11/00 This paper presents some exact solutions to equation the time-dependent risk arising from the migration o radionuclides from an underground repository.
KEYWORDS	RADIONUCLIDE MIGRATION: risk analysis.
LOCATION	
REFERENCE	
AUTHOR	McCauley, V.S.; Raines, G.E.
TYPE	govt

ORGANIZATION	Office of Nuclear Waste Isolation. (USA).
TITLE	EXPECTED BRINE MOVEMENT AT POTENTIAL NUCLEAR WASTE R
	SALT SITES.
PUBLISH	August 1987. 152 p.
DATE	87/09/00
ABSTRACT	The BRINEMIG brine migration code predicts rates and of brine migration to a waste package emplaced in a nuclear waste repository in salt. The BRINEMIG code explicit time-marching finite difference code that s balance equation and uses the JENKS equation to pred velocities of brine migration.
KEYWORDS	RADIONUCLIDE MIGRATION: modelling.
LOCATION	
REFERENCE	
AUTHOR	De Regge, P.; Henrion, P.; Monsecour, M.; Put, M. (S voor Kernenergie sck/cen, Mal, Belgium); Cremers, A. (Laboratorium vor Colloidale Scheikunde, Belgium)
TYPE	
ORGANIZATION	

TITLE	FACTS AND FEATURES OF RADIONUCLIDE MIGRATION IN BOOM
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 1-20.
DATE	88/05/00
ABSTRACT	The evolution which took place during ten years of r the behavior of radionuclides in boom clay is descri
KEYWORDS	RADIONUCLIDE MIGRATION: clay.
LOCATION	
REFERENCE	

AUTHOR	Regge, P. de; Cremers, A.; Henrion, P.; Monsecour, M (Centre D'Etude de L'Energie Nucleaire, Mol, Belgium
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).

TITLE	FACTS AND FEATURES OF RADIONULCIDE MIGRATION IN BOOM
PUBLISH	P. 165-166. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: geology, clay.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	FLOW AND TRACER EXPERIMENTS IN CRYSTALLINE ROCKS: RE SEVERAL SWEDISH IN SITU EXPERIMENTS.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 627.
DATE	85/09/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	

AUTHOR	Peach, C.J.; Spiersd, C.J.; Tankink, A.J.; Zwart, H.
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.

TITLE	FLUIDS AND IONIC TRANSPORT PROPERTIES OF DEFORMED SA
PUBLISH	1987. 97 p.
DATE	87/00/00
ABSTRACT	This is a final report on work done on the transport of salt during the period 1 January 1984 to 30 June
KEYWORDS	RADIONUCLIDE MIGRATION: salt.
LOCATION	
REFERENCE	

AUTHOR	Glasbergen, I.P. (Rijksinstituut voor de Volksgezond Miliehygiene, Bilthoven, Netherlands)
--------	--

TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	GEOSPHERE MIGRATION STUDIES AS SUPPORT OF THE COMPAR POTENTIAL DISPOSAL SITES OF RADIOACTIVE WASTE IN ROC
PUBLISH	P. 180-181. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION: salt.
LOCATION	
REFERENCE	

AUTHOR	Warnecke, E. (Physikalisch- Technische Bundesanstalt F.R.); Hild, W. (Gesellschaft fuer Strahlen und Umwe M.B.H., Germany, F.R.)
--------	--

TYPE	
ORGANIZATION	
TITLE	GERMAN EXPERIENCE IN THE FIELD OF RADIONUCLIDE MIGRA GEOSPHERE.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 115-144.
DATE	88/05/00
ABSTRACT	Basic Research and model development as well as site investigations being carried out in the Federal Repu Germany are reviewed.
KEYWORDS	RADIONUCLIDE MIGRATION: modelling, siting.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	GROUNDWATER HYDROLOGY AND SUBSURFACE MIGRATION OF RA AT A COMMERCIAL RADIOACTIVE WASTE BURIAL SITE, WEST YORK.
PUBLISH	USGS Professional Paper 1325. 1986. 89 p.
DATE	86/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION: hydrology.
LOCATION	
REFERENCE	

AUTHOR	Phinney, D.L.; Oversby, V.M. (Lawrence Livermore Nat CA)
TYPE	govt
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).

TITLE	HIGH RESOLUTION MEASUREMENTS OF DIFFUSION IN A POROUS USING THE AMECA ION MICROSCOPE.
PUBLISH	P. 65. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Boback, M.W.; Dugan, T.A.; Fleming, D.A.; Grant, R. R.W.
TYPE	priv
ORGANIZATION	Westinghouse Materials Co. OH (USA).
TITLE	HISTORY OF FMPC RADIONUCLIDE DISCHARGES.
PUBLISH	May 1987. 211 p.
DATE	87/05/00
ABSTRACT	This report presents information on the discharge of radionuclides from the feed materials production cen Discharges to both air and water have occurred, but releases are emphasized because inhalation is the pr potential exposure route for most offsite residents area.
KEYWORDS	RADIONUCLIDE MIGRATION: health.
LOCATION	
REFERENCE	
AUTHOR	Kim, J.I.; Buckau, G.; Zhuang, W. (Institut fuer Rad Garching, West Germany).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.). acad
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	HUMIC COLLOID GENERATION OF TRANSURANIC ELEMENTS IN AND THEIR MIGRATION BEHAVIOUR.
PUBLISH	P. 747-756. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	The generation of humic colloids of Am (III) has bee investigated in Gorleben groundwaters containing dif amounts of humic substances.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	IMPLICATIONS OF SEDIMENTOLOGICAL AND HYDROLOGICAL PR THE DISTRIBUTION OF RADIONUCLIDES: THE EXAMPLE OF A NEAR RAVENGLASS, CUMBRIA.
PUBLISH	Estuarine Coastal & Shelf Science, 1986. V 22 p. 529
DATE	86/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION: geology, salt.

LOCATION REFERENCE	
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	<p>acad</p> <p>INFLUENCE OF REDOX ENVIRONMENTS ON THE GEOCHEMICAL B RADIONUCLIDES. Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 709. 85/09/00</p> <p>RADIONUCLIDE MIGRATION: chemistry, geology.</p>
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	<p>Vakulovskii, S.M.; Nikitin, A.I.; Chumichev, V.B. acad</p> <p>INFLUENCE OF THE ARRIVAL OF RADIOACTIVE INDUSTRIALLY NORTH SEA WATER UPON THE RADIATION CONDITIONS IN THE Sov. At. Energy. Aug. 1987. V. 62(2) p. 126-130. 87/08/00</p> <p>The authors present and evaluate data from a four ye monitoring the movement of radioactive effluents for radiochemcial plants of western Europe from the Nort Baltic Sea and determine the concentrations at vario along this pathway for 134CS, 137CS, 90SR isotopes. RADIONUCLIDE MIGRATION:</p>
AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE	<p>Phinney, D.L.; Ryerson, F.J.; Oversby, V.M.; Lanford Aines, R.D.; Bates, J.K. (Lawrence Livermore Nationa Bates, J.K.; Seefeldt, W.B. (eds.). govt Argonne National Lab. Il (USA). INTEGRATED TESTING OF THE SRL-165 GLASS WASTE FORM. P. 433-446. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19 87/00/00</p> <p>Integrated testing of the important components of a form waste package has been performed in order to ga understanding of the processes of radionuclide relea transport in the near field environment. RADIONUCLIDE MIGRATION: glass.</p>
AUTHOR TYPE ORGANIZATION	<p>Nowak, E.J.; McTigue, D.F. govt Sandia National Lab. NM (USA).</p>
TITLE PUBLISH DATE ABSTRACT	<p>INTERIM RESULTS OF BRINE TRANSPORT STUDIES IN THE WA PILOT PLANT. May 1987. 88 p. 87/05/00</p> <p>A preliminary analysis of brine movement in a radioa repository was begun with a highly idealized fluid f</p>

KEYWORDS	for porous media. The results and need for further s
LOCATION	discussed.
REFERENCE	RADIONUCLIDE MIGRATION:
AUTHOR	Hollamn, A.; Tittel, G.; Warnecke, E. (Physikalisch
TYPE	Bundesanstalt, Braunschweig, Germany, F.R.)
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	INTERRELATION BETWEEN THE SORPTION DATA OF RADIONUCL
	NATURAL SYSTEMS AND THE BOUNDARY CONDITIONS. (KONRAD
	GORLEBEN)
PUBLISH	P. 86. Chemistry and Migration Behavior of Actinides
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Bolgarev, V.P.; Rogozine, Y.M.; Bryzgalova, R.V.
TYPE	govt
ORGANIZATION	
TITLE	INVESTIGATION OF TRANSFER PROCESSES OF RADIONUCLIDES
	POROUS MEDIUM.
PUBLISH	Radiokhimiya. 1987. v. 29(3) p. 372-376.
DATE	87/00/00
ABSTRACT	The equation simulating radionuclide transfer in a c
	with porous medium by a diffusion mechanism taking i
	porosity, tortuosity, the process of equilibrium sor
	radioactive decay is suggested.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	
TITLE	INVESTIGATION OF TRANSPORT-PROCESSES ALONG THE ELBE
	CHERNOBYL RADIONUCLIDES AS TRACERS.
PUBLISH	Environmental Technology Letters. April 1988. V. 9(4
DATE	88/04/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Uematsu, K. (Power Reactor and Nuclear Fuel Developm
TYPE	Tokyo, Japan)
ORGANIZATION	
TITLE	JAPANESE APPROACHES TO THE ASSESSMENT OF RADIONUCLID
	IN THE GEOSPHERE.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988.
	145-158.
DATE	88/05/00
ABSTRACT	In the last five years, the identification of potent
	geological formation in Japan was performed includin

KEYWORDS	key-study on radionuclide migration within the geosp
LOCATION	RADIONUCLIDE MIGRATION: geology.
REFERENCE	
AUTHOR	Thompson, J.L.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	LABORATORY AND FIELD STUDIES RELATED TO THE RADIONUC MIGRATION PROJECT: PROGRESS REPORT, OCT. 1, 1985- SE 1986.
PUBLISH	August 1987. 30 p.
DATE	87/08/00
ABSTRACT	In this report we describe the work done at Los Alam of the radionuclide migration project during fiscal
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Thompson, J.L. (comp.)
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	LABORATORY AND FIELD STUDIES RELATED TO THE RADIONUC MIGRATION PROJECT: PROGRESS REPORT, OCTOBER 1, 1986- 30, 1987.
PUBLISH	February 1988. 29 P.
DATE	88/02/00
ABSTRACT	In this report we describe the research done by pers Los Alamos National Lab in support of the radionucli project.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Serne, R.J.; Martin, W.J.; McLaurine, S.B.; Airhart, Legore, V.L.; Treat, R.L.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	LABORATORY LEACH TESTS OF PHOSPHATE/SULPHATE WASTE G LEACHATE ADSORPTION TESTS USING HANFORD SEDIMENT.
PUBLISH	December 1987. 296 p.
DATE	87/12/00
ABSTRACT	An assessment of the long-term risks posed by grout Hanford requires data on the ability of grout to res of waste species contained in the grout via contact that percolates through the ground.
KEYWORDS	RADIONUCLIDE MIGRATION: leaching.
LOCATION	
REFERENCE	
AUTHOR	Vandergraaf, T.T.; Grondin, D.M.; Drew, D.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	LABORATORY RADIONUCLIDE MIGRATION EXPERIMENTS AT A S
PUBLISH	Reprinted from Materials Research Society Symposia P (1988) 112:159-168.
DATE	88/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

AUTHOR	Doxtader, M.M.; Maroni, V.A.; Beitz, J.V.; Heaven, M
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il. (USA).
PUBLISH	LASER PHOTOACOUSTIC SPECTROSCOPY FOR TRACE LEVEL DET
DATE	ACTINIDES IN GROUNDWATER.
ABSTRACT	P. 173-184. Scientific Basis for Nuclear Waste Manag
	Pittsburgh, PA (USA). Materials Research Society. 19
	87/00/00
	Ultrasensitive laser-based techniques, such as laser
	photoacoustic spectroscopy (LPAS) and laser induced
	(LIF), are being developed as analytical methods for
	trace-level detection and speciation of actinides in
	typical of those encountered in groundwaters near th
	repository. In this paper we examine the utility of
	technique for elucidating the chemical behaviour of
	present in the near-field environment of the BWIP.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	
TITLE	LEACHIBILITY OF RADIOACTIVE CONSTITUENTS FROM URANIU
PUBLISH	TAILINGS.
	Environment Canada Report EPA 3/MM/2. April 1987. 25
DATE	
ABSTRACT	87/04/00
KEYWORDS	
LOCATION	RADIONUCLIDE MIGRATION: leaching.
REFERENCE	
AUTHOR	Mcauley, I.R.
TYPE	acad
ORGANIZATION	Trinity College. (Ireland).
TITLE	LEVELS OF CS-137 IN SEDIMENTS DEPOSITED IN INTERTIDA
PUBLISH	THE IRISH COAST.
DATE	CEC Report EUR 9214 EN. 1984. p. 201-214.
ABSTRACT	84/00/00
	The nuclear reprocessing plant at Sellafield, UK, di
	radioactive liquid effluent directly into the Irish
	samples of the intertidal sediments were analyzed to
	the variation in radiocaesium with depth. Uptake of
	by sediments is proportional to the activity of the
	which they are immersed and dependent on particulate siz
KEYWORDS	RADIONUCLIDE MIGRATION: chemistry, hydrogeology.
LOCATION	
REFERENCE	
AUTHOR	Moltyaner, G.L.; Champ, D.R.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	MASS TRANSPORT IN SATURATED POROUS MEDIA: ESTIMATION
PUBLISH	PARAMETERS.
DATE	87/11/01
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	

REFERENCE

AUTHOR Jacobs, D.G.
TYPE assoc
ORGANIZATION American Institute of Chemical Engineers, (USA).
TITLE MCRP SOIL CONTAMINATION TASK GROUP.
PUBLISH American Institute of Chemical Engineers, NY (USA).
DATE 87/00/00
ABSTRACT This report presents the National Council of Radiati
and Measurements' (NCRP) recently established task g
contamination to describe and evaluate the migration
and modes of radiation exposure that can potentially
to radioactive contamination of soil.
KEYWORDS RADIONUCLIDE MIGRATION:
LOCATION
REFERENCE

AUTHOR Nakashima, S.; Nakamura, H. (Japan Atomic Energy Res
Tokai, Ibaraka. Dept. of Environmental Safety Resear

TYPE B. (CEC); Chapman, N.A. (BGS).
govt
ORGANIZATION Commission of the European Communities, Luxembourg.
TITLE MECHANISMS AND QUANTITATIVE EVALUATIONS OF RADIONUCL
IN GEOSPHERE.
PUBLISH P. 386-396. Natural Analogues in Radioactive Waste D
Proceedings of a Symposium Organized by the CEC and
Brussels, BE, on 28-30 April 1987. London. Graham an
1987. 506 p. Radioactive Waste Management Series.
DATE 87/04/00
ABSTRACT All these studies have pointed out some geochemical
useful to evaluate long-term radionuclide fixation i
RADIONUCLIDE MIGRATION: groundwater, granite.
KEYWORDS
LOCATION
REFERENCE

AUTHOR Mackenzie, A.B.; Scott, R.D.; Williams, T.
TYPE acad
ORGANIZATION Scottish Universities Research and Reactor Centre (S
TITLE MECHANISMS FOR NORTHWARDS DISPERSAL OF SELLAFIELD WA
PUBLISH Nature. (London). Sept. 3, 1987. V. 329(6134) p. 42-
DATE 87/09/03
ABSTRACT Results are presented of a study of radionuclide con
in surface intertidal sediments near Sellafield, col
during 1984-85 which provide the basis for an estima
extent of northwards dispersal of the contaminated s
an assessment of the importance of this process rela
transport of radionuclides in solution.
RADIONUCLIDE MIGRATION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR Keiling, C.; Essner, V.; Marx, G. (Freie Univ., Berl
F.R. Inst. fuer Anorganische und Analytische Chemie)
TYPE
ORGANIZATION Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communities,
(Belgium).
TITLE MIGRATION AND SORPTION BEHAVIOR OF ACTINIDES IN SYST
SALINITY UNDER THE INFLUENCE OF ORGANIC COMPLEXING A
P. 105. Chemistry and Migration Behavior of Actinide
Products in the Geosphere. Abstracts. 1987. 196 p.

DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Ohtsuka, Y.; Takebe, S.; Yamamoto, T.; Wadachi, Y. (Energy Research Inst., Tokai, Ibaraki, Tokai Research Establishment)
TYPE	govt
ORGANIZATION	
TITLE	MIGRATION BEHAVIOR OF RADIONUCLIDES (60C, 85SR and 1 AQUIFER.
PUBLISH	J. Nucl. Sci. Technol., Tokyo. Febuary 1988. V.25(2)
DATE	88/02/00
ABSTRACT	The migration behavior of radionuclides in aquifer h studied under a steady flow of water by using aquife apparatus.
KEYWORDS	RADIONUCLIDE MIGRATION: modelling.
LOCATION	
REFERENCE	
AUTHOR	Winkler, A.; Bruehl, H.; Trapp, C. (Freie Univ. Berl F.R. Inst. fuer Angewandte Geologie)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	MIGRATION BEHAVIOR OF TECHNIITIUM IN DIFFERENT ROCKS COMPOSITION OF NATURAL MINERALS.
PUBLISH	P. 69. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: geology.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	MIGRATION BEHAVIOUR OF U(VI) IN TUFF.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 763.
DATE	85/09/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Ogawa, H. (Japan Atomic Energy Rsearch Inst., Tokai, Japan)
TYPE	govt
ORGANIZATION	
TITLE	MIGRATION OF 137Cs ADSORBED ON FINE SOIL PARTICLES T LAYER. FILTRATION BY UNSATURATED SANDY SOIL LAYER.
PUBLISH	J. Nucl. Sci. Technol. Tokyo. March 1988. V.25(3) P.
DATE	88/03/00
ABSTRACT	The experiments on the migration of 137Cs adsorbed o particles in unsaturated sandy soil layers were carr
KEYWORDS	RADIONUCLIDE MIGRATION:

LOCATION

REFERENCE

AUTHOR Menager, M.T.; Parneix, J.C.; Petit, J.C. (CEA Centre Nucleaires de Fontenay-aux-Roses, France)

TYPE Technische Univ. Muenchen, Garching, Germany, F.R. G

ORGANIZATION Radiochemie; Commission of the European Communities, (Belgium).

TITLE MIGRATION OF U, Th AND REE IN A FOSSIL INTRAGRANITIC SYSTEM: IMPLICATIONS FOR THE MOBILITY OF ACTINIDES A

PUBLISH RADWASTE DISPOSAL. (AURIAT GRANITE, MASSIF CENTRAL, P. 55-56. Chemistry and Migration Behavior of Actini

DATE Fission Products in the Geosphere. Abstracts. 1987. 87/00/00

ABSTRACT Published in summary form only.

KEYWORDS RADIONUCLIDE MIGRATION: geologic disposal.

LOCATION

REFERENCE

AUTHOR Ball, T.K.; Basham, I.R.; Hooker, P.J.; Roberts, P.D Geological Survey, Keyworth); MacKenzie, A.B.; Scott (Scottish Universities Research and Reactor Centre, UK); Ivanovich, M. (UKAEA Atomic Energy Research Est Harwell)

TYPE govt/acad

ORGANIZATION Technische Univ. Muenchen, Garching, Germany, F.R. G Radiochemie; Commission of the European Communities, (Belgium).

TITLE NATURAL ANALOGUE STUDIES OF RADIONUCLIDE MIGRATION I

PUBLISH P. 61-62. Chemistry and Migration Behavior of Actini Fission Products in the Geosphere. Abstracts. 1987. 87/00/00

DATE Published in summary form only.

ABSTRACT RADIONUCLIDE MIGRATION:

KEYWORDS

LOCATION

REFERENCE

AUTHOR Ivanovich, M.; Longworth, G.; Wilkins, M.A.; Duerden t.; Nightengale, T.; Edghill, R.B.; Cockayne, D.J.; D Come, B. (CEC); Chapman, N.B. (BGS).

TYPE Commission of the European Communities, Luxembourg.

ORGANIZATION NATURAL ANALOGUE STUDY OF THE DISTRIBUTION OF URANIU

TITLE NUCLIDES BETWEEN THE COLLOID AND SOLUTE PHASES IN TH HYDROGEOLOGICAL SYSTEM OF THE KOONGARRA URANIUM DEPO

PUBLISH AUSTRALIA. p. 300-313. Natural Analogues in Radioactive Waste D Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series. 87/04/00

DATE The colloid sampling technique used in the present p

ABSTRACT

KEYWORDS	based on an ultrafiltration system capable of concen particles whose size is greater than 10000 MW and ha for fractionating the concentrated colloids into par groups.
LOCATION REFERENCE	RADIONUCLIDE MIGRATION: hydrogeology, modelling, nat analogues.
AUTHOR	Hooker, P.J.; Chapman, N.A. (British Geological Surv Mackenzie, A.B.; Sott, R.D. (Scottish Universities R Reactor Centre, Glasgow, UK); Ivanovich, M. (UKAEA H Come, B. (CEC); Chapman, N.A. (BGS).
TYPE	acad/priv
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	NATURAL ANALOGUES OF RADIONUCLIDE MIGRATION IN SEDIM BRITAIN.
PUBLISH	P. 104-115. Natural Analogues in Radioactive Waste D Proceedings of a symposium organized by the CEC and Brussels. Graham & Trotman, 1987. 506 p. Radioactive Management Series.
DATE	87/04/00
ABSTRACT	Confidence in long-term predictions of radionuclide from a repository engineered within a shallow sedime sequence depends on the quality and accuracy of the computer programs that are applied in the safety ass
KEYWORDS	RADIONUCLIDE MIGRATION: safety analysis, natural ana
LOCATION REFERENCE	
AUTHOR	Brotzen, D.
TYPE	priv
ORGANIZATION	FBAB. (Sweden).
TITLE	NATURAL CONSTRAINTS ON THE RELEASE OF ACTINIDES FROM NUCLEAR FUEL EMPLACED IN FRACTURED CRYSTALLINE ROCK POLICIES AND PROGRAMS, HIGH-LEVEL WASTE).
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 435-441.
DATE	84/03/00
ABSTRACT	The contamination of groundwater discharging at the actinides from spent nuclear fuel emplaced in fractu saturated crystalline rock is estimated.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION REFERENCE	
AUTHOR	Green, D.C.; Guthrie, V.A. (Cambridgeshire College o Technology, UK; Tasmania Univ., Australia)
TYPE	Come, B. (CEC); Chapman, N.A. (BGS).
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	NATURAL MINERAL ANALOGUES FROM A HYDROTHERMALLY ALTE
PUBLISH	P. 436-441. Natural Analogues in Radioactive Waste D Proceedings of a symposium organized by the CEC and Brussels. Graham & Trotman, 1987. 506 p. Radioactive Management Series.
DATE	87/04/00
ABSTRACT	Uranium, thorium and R.E.E. concentrations and distr a deep drill hole within the Coles Bay granite are b

KEYWORDS
LOCATION
REFERENCE

investigated using fission-track micromapping and el microprobe analytical techniques, amongst others, in to provide a natural analogue of far field radionucl movement.

RADIONUCLIDE MIGRATION: granite, modelling, natural

AUTHOR
TYPE
ORGANIZATION
TITLE

Lisachenko, E.H.; Ponikarova, T.M.
govt

PUBLISH
DATE
ABSTRACT

NATURAL RADIONUCLIDE DISTRIBUTION IN PHOSPHATE FERTI SUPERPHOSPHATE PRODUCTION TECHNOLOGY. (IN RUSSIAN). Khim. Prom-st'(1987). No. 5 p. 22-24.

87/00/00

This report examines the data obtained on the natura radionuclide distribution by phosphate fertilizer an superphosphate production process.

RADIONUCLIDE MIGRATION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Bidoglio, G.; Offerman, P.; Saltelli, A.
assoc

PUBLISH
DATE
ABSTRACT

Commission of the European Communities, Luxembourg. NEPTUNIUM MIGRATION IN OXIDIZING CLAYEY SAND.

Appl. Geochem. May-June 1987. V. 2(3) p. 275-284.

87/05/00

This paper's purpose is (1) to examine the release f matrix and the migration of 237NP through soil colum develop kinetic models for the process; (3) to deter migration is influenced by chemical speciation: and evaluate the adequacy of a solute transport model to the movement of 237 NP.

RADIONUCLIDE MIGRATION: modelling.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Ahn, J.; Chambre, P.L.; Pigford, T.H.; Lee, W.W.L.
acad

PUBLISH
DATE
ABSTRACT

Lawrence Berkeley Lab. CA (USA).

NUCLIDE MIGRATION FROM AREAL SOURCES INTO A FRACTURE April 1987. 9 p.

87/04/00

This document shows analytic solutions to the proble

KEYWORDS
LOCATION
REFERENCE

hydrogeological transport of radionuclides released areal sources into a planar fracture.

RADIONUCLIDE MIGRATION: analytical techniques.

AUTHOR
TYPE
ORGANIZATION
TITLE

acad

PUBLISH
DATE
ABSTRACT

NUCLIDE MIGRATION THROUGH A PLANAR FISSURE WITH MATR LBNL Report 19429. April 1985. 69 p.

85/04/00

RADIONUCLIDE MIGRATION:

KEYWORDS
LOCATION
REFERENCE

AUTHOR	Jacobsen, J.S.; Carnahan, C.L.
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	NUMERICAL SIMULATION OF ALTERATION OF SODIUM BENTONITE DIFFUSION OF IONIC GROUNDWATER COMPONENTS.
PUBLISH	December 1987. 15 p.
DATE	87/12/00
ABSTRACT	Experiments measuring the movement of trace amounts radionuclides through compacted bentonite have typical unaltered bentonite. Models based on experiments such may not lead to accurate predictions of the migration altered or partially altered bentonite of radionuclides undergo ion exchange.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Warnecke, E. (Physikalisch-Technische Bundesanstalt, Braunschweig, Germany, F.R.); Hild, W. (Gesellschaft Strahlen und Umweltforschung M.B.H., Muenchen, Braun Germany, F.R.)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	OUR EXPERIENCE OF THE MIGRATION OF RADIONUCLIDES IN IN GERMANY. (Konrad, Gorleben, Asse)
PUBLISH	P. 176-177. Chemistry and Migration Behavior of Actinide Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Kershaw, P.J.; Harvey, B.R.
TYPE	govt
ORGANIZATION	UK Ministry of Agriculture, Fisheries and Food. (UK)
TITLE	PHYSICO-CHEMICAL INTERACTIONS OF LONG-LIVED RADIONUCLIDES COASTAL MARINE SEDIMENTS AND SOME COMPARISONS WITH THE ENVIRONMENT.
PUBLISH	CEC Report EUR 9214 EN. 1984. p. 131-142.
DATE	84/00/00
ABSTRACT	The important role played by sedimentary material in radionuclide behaviour in the marine environment is in relation to both physical and chemical effects. Results obtained from studying the interstitial water chemistry in sediments from the Irish Sea are reported with emphasis on behaviour of technetium, neptunium, and plutonium.
KEYWORDS	RADIONUCLIDE MIGRATION: chemistry.
LOCATION	
REFERENCE	
AUTHOR	Shaw, H.F.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA (USA).
TITLE	PLAN FOR SPENT FUEL WASTE FORM TESTING FOR NNWSI.
PUBLISH	November 1987. 36 p.
DATE	87/11/00
ABSTRACT	The purpose of spent fuel waste form testing is to determine

KEYWORDS	rate of release of radionuclides from failed disposa
LOCATION	holding spent fuel, under conditions appropriate to
REFERENCE	project tuff repository.
	RADIONUCLIDE MIGRATION: tuff.
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	PREDICTION OF LONG-TERM RELEASES OF 134Cs FROM CEMEN
	DEDCONTAMINATION WASTES BY SEMI-INFINITE DIFFUSION M
PUBLISH	1984. 1 V.
DATE	84/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Pearson, F.J. Jr.; Kelley, V.A.; Pickens, J.F.
TYPE	priv/govt
ORGANIZATION	Sandia National Labs. NM (USA); INTERA Technologies,
	Austin, TX (USA).
TITLE	PRELIMINARY DESIGN FOR A SORBING TRACER TEST IN THE
	DOLOMITE AT THE H-3 HYDROPAD AT THE WASTE ISOLATION
	(WIPP) SITE.
PUBLISH	Feb 1987. 210 p.
DATE	87/02/00
ABSTRACT	The use of sorbing tracers in a field hydrologic tes
	of estimating the nuclide transport characteristics
	location in the Culebra dolomite at the Waste Isolati
	Plant (WIPP) site. The culebra is considered to be t
	continuous pathway from the site in the event of a b
	planned nuclear waste repository.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Allen, A.J.; Bourke, M.A. (UKAEA Harwell Lab. Materi
	and Metallurgy Div.); Bourke, P.J.; Jefferies, N.L.
TYPE	
ORGANIZATION	UKAEA Harwell Lab. Chemistry Div.; United Kingdom Ni
TITLE	PRELIMINARY NEUTRON SCATTERING STUDIES OF POROSITY O
PUBLISH	December 1987. 25 p.
DATE	87/12/00
ABSTRACT	Attempts to measure diffusively accessible porosity
	clay using iodide as the diffusing solute in pore wa
	values of about 10% in hundred hour tests.
KEYWORDS	RADIONUCLIDE MIGRATION: clay.
LOCATION	
REFERENCE	
AUTHOR	Eckert, J.L.; Kalia, H.N.; Coyle, A.J.
TYPE	govt
ORGANIZATION	Battelle Memorial Institute, OH (USA). Office of Nuc
	Isolation.
TITLE	QUARTERLY BRINE MIGRATION DATA REPORT, OCTOBER-DECEM
	NUCLEAR WASTE REPOSITORY SIMULATION EXPERIMENTS, ASS
	THE FEDERAL REPUBLIC OF GERMANY.
PUBLISH	July 1987. 264 p.
DATE	87/07/00

ABSTRACT	Test equipment, the Asse salt mine, and the pretest the salt in the test gallery are described including the first 19 months of operations on brine migration borehole pressure, salt temperatures, and thermomech behaviour of the salt.
KEYWORDS	RADIONUCLIDE MIGRATION: salt.
LOCATION	
REFERENCE	
AUTHOR	Vovk, I.F. (International Atomic Energy Agency, Vien
TYPE	assoc
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	RADIOLYSIS AS A FACTOR INFLUENCING MIGRATION BEHAVIO IN THE GEOSPHERE.
PUBLISH	P. 32-33. Chemistry and Migration Behavior of Actini Fission Products in the Geosphere. Abstracts. 1987.

DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

AUTHOR	Hadermann, J.; Gunten, H.R. Von (Eidgenoessisches In Reaktorforschung, Wuerrenlingen, Switzerland); Mcomb McKinley, I. (Nationale Genossenschaft zur Lagerung Abafaelle, Baden, Switzerland)
TYPE	govt/acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	RADIONUCLIDE MIGRATION IN THE GEOSPHERE- SWISS RESEA ACTIVITIES IN LABORATORY AND FIELD EXPERIMENTS AND I VALIDATION.
PUBLISH	P. 186-187. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

AUTHOR	Hadermann, J.; Gunten, H.R. Von (Paul Scherrer Inst. Wuerenlingen, Switzerland); McCombie, C.; McKinley, (Nationale Genossenschaft fuer die Lagerung Radioack Abafelle, Baden, Switz.)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	RADIONUCLIDE MIGRATION IN THE GEOSPHERE - SWISS RESE ACTIVITIES IN LABORATORY AND FIELD EXPERIMENTS AND I VALIDATION.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. P.233-255.
DATE	88/05/00
ABSTRACT	In the multibarrier system of a nuclear waste reposi geosphere represents an important component. For per assessments, predictive modelling of radionuclide tr the geosphere is one of the main tasks.

ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Green, R.T.; Evans, D.D.
TYPE	govt/acad
ORGANIZATION	Arizona University, AZ (USA).; Nuclear Regulatory Co Washington DC (USA).
TITLE	RADIONUCLIDE TRANSPORT AS VAPOR THROUGH UNSATURATED ROCK.
PUBLISH	July 1987. 196 p.
DATE	87/07/00
ABSTRACT	Transport mechanisms potentially important at larger include ordinary diffusion, viscous flow, and free c These are studied and reported.
KEYWORDS	RADIONUCLIDE MIGRATION: geology.
LOCATION	
REFERENCE	
AUTHOR	Kim, C.L.; Chambre, P.L.; Lee, W.W.L.; Pigford, T.H.
TYPE	acad
ORGANIZATION	
TITLE	RADIONUCLIDE TRANSPORT FROM AN ARRAY OF WASTE PACKAG GEOLOGIC REPOSITORY.
PUBLISH	Trans. Am. Nucl. Soc. 1987. V. 54 P.109-110.
DATE	87/00/00
ABSTRACT	Nuclear waste in geologic repositories will be empla thousands of individual containers. In evaluating ra transport in performance assessments.
KEYWORDS	RADIONUCLIDE MIGRATION: containment.
LOCATION	
REFERENCE	
AUTHOR	Eriksen, T.E.
TYPE	priv
ORGANIZATION	Swedish Nuclear Fuel Supply Co. (Sweden).
TITLE	RADIONUCLIDE TRANSPORT IN A SINGLE FISSURE. A LABORA AM, NP, AND TC.
PUBLISH	1984. 27 p.
DATE	84/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	RADIONUCLIDE TRANSPORT MODELLING IN FISSURED ZONES A
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede

DATE	9-11, 1985. p. 655.
ABSTRACT	85/09/00
KEYWORDS	RADIONUCLIDE MIGRATION: modelling.
LOCATION	
REFERENCE	
AUTHOR	Boust, D.
TYPE	
ORGANIZATION	CEA Centre de la Hague (France).
TITLE	RARE EARTH ELEMENTS DURING DIAGENESIS OF ABYSSAL SED
	ANALOGIES WITH A TRANSURANIC ELEMENT AMERICIUM. (IN
PUBLISH	Mar 1987. 296 p.
DATE	87/03/00
ABSTRACT	One of the possibilities for the storage of high-lev
	radioactive wastes consists of burying them into aby
	sediments, the sediments being supposed to barrier o
	radionuclides migration. The objective of the work w
	estimate the efficiency of sediment barrier with res
	Americium.
KEYWORDS	RADIONUCLIDE MIGRATION: disposal and storage alterna
LOCATION	
REFERENCE	
AUTHOR	Kurobane, Y.; Fukui, M. (Kyoto Univ., Japan)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	REACTIVE SOLUTE TRANSPORT IN FRACTURED ROCK: ANALYTI
	FOR INSTANTANEOUS SOURCE CONDITIONS.
PUBLISH	P. 126. Chemistry and Migration Behavior of Actinide
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: geology.
LOCATION	
REFERENCE	
AUTHOR	Boles, J.S.; Ritchie, K.
TYPE	acad
ORGANIZATION	Princeton University. NJ (USA).
TITLE	REDUCING THE POTENTIAL FOR MIGRATION OF RADIOACTIVE
	AQUEOUS THERMAL DEGRADATION OF THE CHELATING AGENT D
	EDTA.
PUBLISH	Nucl. Chem. Waste Management. (1987). V. 7(2) p. 89-
DATE	87/00/00
ABSTRACT	Ethylenediaminetetraacetic acid (EDTA), a common com
	cleaning solutions used for decontamination of radio
	equipment, has been associated with increased migrat
	radionuclides into local grondwaters at some radwast
	sites. Solutions are test and described in this page
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Chambre, P.L.; Kwang, Y.; Lee, W.W.L.; Pigford, T.H.
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	RELEASE RATES FROM WASTE PACKAGES IN A SALT REPOSITO

PUBLISH	June 1987. 6 p.
DATE	87/06/00
ABSTRACT	In this report we present estimates of radionuclide from waste packages into salt.
KEYWORDS	RADIONUCLIDE MIGRATION: salt.
LOCATION	
REFERENCE	
AUTHOR	Heinrich, W.F.; Andres, T.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	REPONSE FUNCTIONS OF THE CONVECTION-DISPERSION EQUAT DESCRIBING RADIONUCLIDE MIGRATION IN A SEMI-INFINITE
PUBLISH	7 p. (1985). Reprinted from Annals of Nuclear Energy 12(12):685-691.
DATE	85/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Johnston, P.D. (Her Majesty's Inspectorate of Pollut Department of the Environment, London)
TYPE	govt
ORGANIZATION	
TITLE	RESEARCH ON RADIONUCLIDE MIGRATION IN THE UK.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 257-265.; P. 188. Chemistry and Migration Behavior o and Fission Products in the Geosphere. Abstracts. 19
DATE	88/05/00
ABSTRACT	Research relevant to understanding and modelling the radionuclides in the geosphere from radioactive wast described.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Leneveu, D.M.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	RESPONSE FUNCTION OF THE CONVECTION-DISPERSION EQUAT DESCRIBING RADIONUCLIDE MIGRATION IN A FINITE MEDIUM
PUBLISH	6 p. (1987). Reprinted from Annals of Nuclear Energy 14(2):77-82.
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Snellman, M. (Valtion Teknillinen Tutkimuskeskus, Fi Reaktorilaboratorio); Hakanen, M.; Suksi, S. (Helsin Finland. Dept. of Radiochemistry); Rasilainen, K.; N (Teollisuuden Voima oy, Finland)
TYPE	
ORGANIZATION	
TITLE	REVIEW OF FINNISH EXPERIENCE IN RADIONUCLIDE MIGRATI
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 65-80.
DATE	88/05/00
ABSTRACT	The Finnish nuclear waste program is outlined and st

KEYWORDS	performed in Finland related to the migration of rad
LOCATION	from a repository for nuclear waste in crystalline b
REFERENCE	described.
	RADIONUCLIDE MIGRATION: geologic disposal.
AUTHOR	Snellman, M.; Rasilainen, K. (Valtion Teknillinen Tu
	Helsinki, Finland); Hakanen, M.; Suksi, S. (Helsinki
	Helsinki, Finland)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	REVIEW ON FINNISH EXPERIENCE IN RADIONUCLIDE MIGRATI
PUBLISH	P. 171-172. Chemistry and Migration Behavior of Acti
	Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Aarkrog, A.
TYPE	govt
ORGANIZATION	Riso National Lab. (Denmark).
TITLE	RISK ASSESSMENT OF LONG-LIVED RADIONUCLIDES IN THE M
	ENVIRONMENT.
PUBLISH	CEC Report EUR 9214 EN. 1984. p. 419-441.
DATE	84/00/00
ABSTRACT	The global collective effective dose equivalent comm
	natural radionuclides in the ocean are estimated. Th
	compared with doses from waterborne discharges from
	nuclear installations.
KEYWORDS	RADIONUCLIDE MIGRATION: marine disposal, risk analys
LOCATION	
REFERENCE	
AUTHOR	Gauthier, R.; Buckau, G.; Dienstbach, F.; Kim, J.I.;
	Portillo, C. (Technische Univ., Muenchen, Garching,
	F.R. Inst. fuer Radiochemie)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities,
	(Belgium).
TITLE	SAMPLING, PRESERVATION AND CHARACTERIZATION OF GROUN
	THE MIGRATION STUDY. (GORLEBEN AQUIFERS).
PUBLISH	P. 140. Chemistry and Migration Behavior of Actinide
	Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in Summary form only
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Kershaw, P.; Young, A. (Ministry of Agriculture, Fis
	Food, Lowestoft, UK. Directorate of Fisheries Resear
TYPE	govt
ORGANIZATION	
TITLE	SCAVENGING OF 234TH IN THE EASTERN IRISH SEA.
PUBLISH	J. Environ. Radioact. 1988. V.6(1) P.1-23.

DATE	88/00/00
ABSTRACT	Measurements of the disequilibria of $^{234}\text{Th}/^{238}\text{U}$ in s in suspended particulate and seabed sediment in the Irish Sea reveal that the residence time of dissolve controlled by the concentration of particles in susp
KEYWORDS	RADIONUCLIDE MIGRATION: marine disposal.
LOCATION	
REFERENCE	
AUTHOR	Kepak, F. (Ustav Jaderneho Cskae, Rez, Czechoslovaki
TYPE	
ORGANIZATION	
TITLE	SEPARATION OF RADIONUCLIDES FROM GAS BY SORPTION ON CHARCOAL AND INORGANIC SORBENTS.
PUBLISH	Isotopenpraxis. January 1988. V.24(1) P. 1-5.
DATE	88/00/00
ABSTRACT	The review deals with the sorption and ion exchange radionuclides on activated charcoal and on inorganic
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Liu, S.J.; Wang, S.G.; Ho, L.W. (Inst. of Nuclear En Research, Lungtang, Taiwan)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
TITLE	Radiochemie; Commission of the European Communities, (Belgium). SIMULATION OF RADIONUCLIDE CHEMISTRY AND SORPTION CH IN THE GEOSPHERE BY ARTIFICIAL INTELLEAGENT TECHNIQUE
PUBLISH	P. 100. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: chemistry, modelling.
LOCATION	
REFERENCE	
AUTHOR	Karlsson, F. (Swedish Nuclear Fuel and Waste Managem Stockholm)
TYPE	govt
ORGANIZATION	
TITLE	SOME SWEDISH STUDIES ON THE TRANSPORT OF RADIONUCLID GRANITIC ROCK.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 219-232.; P. 184-185. Chemistry and Migration Behavi Actinides and Fission Products in the Geosphere. Abs 1987. 196 p.
DATE	88/05/00
ABSTRACT	The present program of research and development in t safety assessment for radioactive waste disposal is based on experiences from the studies kbs-1 of 1977, 1978 and kbs-3 of 1983, the first on the disposal of high-level reprocessing waste and the later two on s
KEYWORDS	RADIONUCLIDE MIGRATION: granite.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	

TITLE	SORPTION AND DIFFUSION OF RADIONUCLIDES IN ROCK MATR
PUBLISH	NATURAL FRACTURE SURFACES STUDIED BY AUTORADIOGRAPHY
DATE	Nuclear Waste Management Symposium. Stockholm (Swede
ABSTRACT	9-11, 1985. p. 747.
KEYWORDS	85/09/00
LOCATION	RADIONUCLIDE MIGRATION: geology.
REFERENCE	

AUTHOR	Kautsky, M.
TYPE	govt
ORGANIZATION	
TITLE	SORPTION OF CESIUM AND STRONTIUM BY ARID REGION DESE
PUBLISH	University of Nevada Desert Research Institute Water
DATE	Center Report 45037. May 1984. 103 p.
	84/05/00

ABSTRACT	Sorption and ion exchange properties of strontium an
	studied since those characteristics slow the migrati
	nuclear waste to the biosphere and radioactive isoto
	elements are commonly contained in nuclear waste.
KEYWORDS	RADIONUCLIDE MIGRATION: monitoring.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	SORPTION OF SOME FISSION PRODUCTS AND ACTINIDES IN C
PUBLISH	SYSTEMS.
DATE	Nuclear Waste Management Symposium. Stockholm (Swede
ABSTRACT	9-11, 1985. p. 683.
KEYWORDS	85/09/00
LOCATION	RADIONUCLIDE MIGRATION: concrete.
REFERENCE	

AUTHOR	Oversby, V.M. (Lawrence Livermore National Lab., CA)
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	priv
TITLE	Argonne National Lab. 11 (USA).
PUBLISH	SPENT FUEL AS A WASTE FORM - DATA NEEDS TO ALLOW LON
DATE	PERFORMANCE ASSESSMENT UNDER REPOSITORY DISPOSAL CON
ABSTRACT	P. 87-101. Scientific Basis for Nuclear Waste Manage
	Pittsburgh, PA (USA). Materials Research Society. 19
	87/00/00
	This paper will review the factors that affect the r
	radionuclides from spent fuel under repository condi
	summarize their present state of knowledge, and sugg
	where more work is needed in order to support the pe
	assessment calculations.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

AUTHOR	Bonano, E.J.; Shipers, L.R. (Sandia National Labs.,
TYPE	NM)
ORGANIZATION	govt
TITLE	STOCHASTIC ANALYSIS OF CONTAINMENT TRANSPORT IN PORO

PUBLISH
DATE
ABSTRACT

ANALYSIS OF A TWO-MEMBER RADIONUCLIDE CHAIN.
Water Resource. Res. June 1987. V. 23(^0 P. 1063-107
87/07/00
In this study the authors extend previous stochastic
containment transport in geologic media for a single
a chain of two species. The authors particular appli
the quantification of uncertainties due to lack of
characterization of the spacial variability of hydro

KEYWORDS
LOCATION
REFERENCE

parameters on transport of radionuclides from a high
repository to the biosphere.
RADIONUCLIDE MIGRATION: containment.

AUTHOR
TYPE
ORGANIZATION
TITLE

Lee, R.; Ketelle, D.
govt
Oak Ridge National Lab. TN (USA).
STRATABOUND PATHWAYS OF PREFERRED GROUNDWATER FLOW:
FROM THE COPPER RIDGE DOLOMITE IN EAST TENNESSEE.
14 July 1987. 26 p.
87/07/14

PUBLISH
DATE
ABSTRACT

The Copper Ridge dolomite of the Upper Cambrian Knox
underlies a site at Oak Ridge, TN, under considerati
DOE for a below ground waste disposal facility. Copp
studied to understand the influence of lithology on
groundwater flow.
RADIONUCLIDE MIGRATION: groundwater.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Tyler, P.A.; Walker, M. (Univ. Coll. of Swansea (UK)
acad
Department of the Environment. London (UK).
STUDIES OF THE REPRODUCTIVE BIOLOGY OF DEEP SEA MEGA
BIOCHEMICAL AND CALORIFIC CONTENT OF THE REPRODUCTIV
DEEP SEA HOLOTHURIANS.
1987, 22 p.
87/00/00

PUBLISH
DATE
ABSTRACT

The data for protein, lipid, carbohydrate and ash co
ovary, testes, gut, and body wall of a variety of de
holothurians are presented. The data suggest active
pathways in these species which may pass radionuclid
developing gametes and after spawning to dispersal i
waters.

KEYWORDS
LOCATION
REFERENCE

RADIONUCLIDE MIGRATION: marine disposal, biology.

AUTHOR
TYPE
ORGANIZATION

Rahman, M.M.; Mollah, A.S.; Islam, S.; Raman, H.; Ko
(Atomic Energy Research Establishment, Dacca, Bangla
Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communités,
(Belgium).

TITLE

STUDIES ON THE ABSORPTION OF SELECTIVE FISSION AND A
RADIONUCLIDES BY LOCAL SOIL MATRIX.

PUBLISH

P. 121. Chemistry and Migration Behavior of Actinide
Products in the Geosphere. Abstracts. 1987. 196 p.

DATE
ABSTRACT

87/00/00
Published in summary form only.

KEYWORDS
LOCATION
REFERENCE

RADIONUCLIDE MIGRATION:

AUTHOR
TYPE
ORGANIZATION
TITLE

Bruno, J.; Genthe, I.; Munoz, M.
acad

PUBLISH

STUDIES ON THE RADIONUCLIDE COPRECIPITATION - SOLID
FORMATION.

DATE

Scientific Basis for Nuclear Waste Management IX. Ma
Research Society Symposia Proceedings. V. 50. 1985.
85/00/00

ABSTRACT

KEYWORDS

RADIONUCLIDE MIGRATION: precipitation.

LOCATION

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Gustafsson, E.; Klockars, C.E.
govt

PUBLISH

Svensk Karnbranslefordrning, AB. (Sweden).
STUDY OF THE STRONTIUM AND CESIUM MIGRATION IN FRACT
CRYSTALLINE ROCK.

DATE

KBS Technical Report 81-07.
84/00/00

ABSTRACT

KEYWORDS

RADIONUCLIDE MIGRATION:

LOCATION

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

govt
US DOE Office of Energy Research, Washington, DC (US
SUBSURFACE TRANSPORT PROGRAM: RESEARCH SUMMARY.
Jan. 1987. 51 p.
87/01/00

DOE's research program in subsurface transport, desi
provide a base of fundamental scientific information
geochemical, hydrological, and biological mechanisms
contribute to the transport and long term fate of en
contaminants in subsurface ecosystems, is presented.
RADIONUCLIDE MIGRATION: hydrology, biology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Wilson, C.N.
priv
Pacific Northwest Lab. WA; Westinghouse Hanford Co.,
(USA).

TITLE

SUMMARY OF RESULTS FROM THE SERIES 2 AND SERIES 3 NN
DISSOLUTION TESTS.

PUBLISH

November 1987. 15 p.

DATE

87/11/00

ABSTRACT	The NNWSI project is studying dissolution and radion release behavior of spent nuclear fuel in Nevada tes groundwater.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Hanke, C.; Lieser, K.H. (Technische Hochschule Darms Germany, F.R. Inst. fuer Kernchemie)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	TECHNETIUM IN THE GEOSPHERE.
PUBLISH	P. 72. Chemistry and Migration Behavior of Actinides Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: geology.
LOCATION	
REFERENCE	
AUTHOR	Baudin, G. (CEA Centre D'Etudies Nucleaires de Fontenay-aux-Roses, France)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE	TECHNICAL ASPECTS OF THE FRENCH PROGRAM DEVOTED TO T RADIONUCLIDE MIGRATION IN THE GEOSPHERE: A REVIEW.
PUBLISH	P. 173-175. Chemistry and Migration Behavior of Acti Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Baudin, G.; Billon, A.; Petit, J.C. (CEA Centre D'Et Nuclearies de Fontenay-aux-Roses. Dept. de Recherche Developpement des Dechets)
TYPE	
ORGANIZATION	
TITLE	TECHNICAL ASPECTS OF THE FRENCH R AND D PROGRAMME DE RADIONUCLIDE MIGRATION IN THE GEOSPHERE: A REVIEW.
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 81-113.
DATE	88/05/00
ABSTRACT	Estimating the efficiency of a given geological form retard radionuclide migration raises complex issues CEA tackle by means of a multidisciplinary approach lab studies, field studies, analogue studies, and mo
KEYWORDS	
LOCATION	
REFERENCE	RADIONUCLIDE MIGRATION: modelling.
AUTHOR	Greef, E. de (Rijksinstituut Voor Volksgezondheid en Miliehygiene, Biltoven, Netherlands)
TYPE	
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R.. Radiochemie; Commission of the European Communities,

TITLE	(Belgium). THE APPLICATION OF GORDON'S RELATION TO THE DIFFUSION OF RADIONUCLIDE COMPLEXES IN CONCENTRATED SALT SOLUTION
PUBLISH	P. 156-157. Chemistry and Migration Behavior of Actinides and Fission Products in the Geosphere. Abstracts. 1987.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Gorman, D.J.
TYPE	priv/govt
ORGANIZATION	Ontario Hydro. (Canada).
TITLE	THE BASIS FOR THE DERIVED LIMITS FOR THE EMISSION OF RADIONUCLIDES IN AIRBORNE AND LIQUID EFFLUENTS FROM NUCLEAR FACILITIES.
PUBLISH	Toronto, (Canada). 1986. 146 p.
DATE	86/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Warwick, P.; Shaw, P. (Loughborough Univ. of Technology); Williams, G.M.; Hooker, P.J. (British Geological Survey)
TYPE	govt/acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R.G.; Radiochemie; Commission of the European Communities, (Belgium).
TITLE	THE COMPLEXATION OF RADIONUCLIDES WITH ORGANIC MATTER IN GROUNDWATER.
PUBLISH	P. 87. Chemistry and Migration Behavior of Actinides and Fission Products in the Geosphere. Abstracts. 1987. 196 p.
DATE	87/00/00
ABSTRACT	Published in summary form only.
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Mathers, W.G.; Harvey, K.B.
TYPE	govt
ORGANIZATION	
TITLE	Atomic Energy of Canada Ltd. THE DISSOLUTION OF A GLASS IN AN INFINITE VOLUME OF WATER
PUBLISH	Nucl. Chem. Waste Mang. 1987. V. 7(2) p. 163.
DATE	87/00/00
ABSTRACT	The release of a species from a solid that is dissolving is of particular interest in scenarios that describe possible release of radionuclides from glasses that immobilized nuclear fuel wastes. In this work, the rate of release is compared with a more rigorous solution, use of the linear diffusion equation.
KEYWORDS	RADIONUCLIDE MIGRATION: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	Garisto, N.C.; Garisto, F.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE EFFECT OF PRECIPITATION ON THE LONG-TERM RELEASE OF RADIONUCLIDES FROM GLASS

PUBLISH	RADIONUCLIDES FROM USED FUEL.
DATE	6 p. (1986). Reprinted from Annals of Nuclear Energy
ABSTRACT	13(11):591-596.
KEYWORDS	86/00/00
LOCATION	RADIONUCLIDE MIGRATION: precipitation.
REFERENCE	
AUTHOR	Walton, F.B.; Ross, J.P.M.; Juhnke, D.G.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE EFFECTS OF SIMULTANEOUS HEAT AND MASS TRANSPORT
PUBLISH	RADIONUCLIDE MIGRATION.
DATE	10 p. (1985). Reprinted from Materials Research Soci
ABSTRACT	Proceedings (1985) 50:663-672.
KEYWORDS	85/00/00
LOCATION	RADIONUCLIDE MIGRATION: thermodynamics.
REFERENCE	
AUTHOR	Hunter, R.L.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	THE IMPORTANCE OF SCENARIO DEVELOPMENT IN MEETING 40
PUBLISH	191.
DATE	1988. 7 P.
ABSTRACT	88/00/00
KEYWORDS	In general, a few hundred scenarios for the release
LOCATION	radionuclides from a nuclear waste repository can be
	but only a few of these can or should be modelled in
	RADIONUCLIDE MIGRATION: modelling.
REFERENCE	
AUTHOR	Loewen, N.R.; Flett, R.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE POSSIBLE EFFECTS OF MICROORGANISMS UPON THE MOBI
PUBLISH	RADIONUCLIDES IN THE GROUNDWATERS OF THE PRECAMBRIAN
DATE	Technical Report TR-217, 1984. 78 p.
ABSTRACT	84/00/00
KEYWORDS	RADIONUCLIDE MIGRATION: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Stroes-Gascoyne, S.; Johnson, L.H.; Sellinger, D.M.
TYPE	govt
ORGANIZATION	Energy of Canada Ltd., Whiteshell Nuclear Reasearch
TITLE	Establishment, Pinawa, Man.)
PUBLISH	THE RELATIONSHIP BETWEEN GAP INVENTORIES OF STABLE X
DATE	137/Cs, AND /SU 129/I IN USED CANDU FUEL.
ABSTRACT	Nucl. Technol. June 1987. V.77(3) P.320-330.
KEYWORDS	87/06/00
LOCATION	Safety assessment of the used fuel disposal concept
	study of the integrity of used fuel in contact with
	RADIONUCLIDE MIGRATION: groundwater.

REFERENCE

AUTHOR Ramsay, J.D.F. (UKAEA Atomic Energy Research Establi Harwell)
TYPE assoc
ORGANIZATION Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE THE ROLE OF COLLOIDS IN THE MIGRATION OF RADIONUCLID NUCLEAR WASTE.
PUBLISH P. 144. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE 87/00/00
ABSTRACT Published in summary form only.
KEYWORDS RADIONUCLIDE MIGRATION: chemistry.
LOCATION
REFERENCE

AUTHOR Behrens, H. (Gesellschaft fuer Strahlen und Umweltfo M.B.H. Muenchen, Nueherberg, Germany, F.R.)
TYPE
ORGANIZATION Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE THE ROLE OF IODINE SPECIATION IN RADIOIODINE SORPTIO

PUBLISH P. 111. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE 87/00/00
ABSTRACT Published in summary form only.
KEYWORDS RADIONUCLIDE MIGRATION:
LOCATION
REFERENCE

AUTHOR Bogorinski, P.; Baltes, B.; Larue, J.; Martens, K.H. (Gesellschaft fuer Reaktorsicherheit M.B.H., Koeln, F.R.)
TYPE
ORGANIZATION Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE THE ROLE OF TRANSPORT CODE VERIFICATION AND VALIDATI LICENSING NUCLEAR WASTE REPOSITORIES IN THE FR OF GE
PUBLISH P. 162. Chemistry and Migration Behavior of Actinide Products in the Geosphere. Abstracts. 1987. 196 p.
DATE 87/00/00
ABSTRACT Published in summary form only
KEYWORDS RADIONUCLIDE MIGRATION: modelling, licensing.
LOCATION
REFERENCE

AUTHOR Bruno, J.; Sandino, A. (Royal Inst. of Tech., Stockh acad
TYPE
ORGANIZATION Technische Univ. Muenchen, Garching, Germany, F.R. I Radiochemie; Commission of the European Communities, (Belgium).
TITLE THE THERMODYNAMICS AND KINETICS OF CO-PRECIPITATION EFFECT ON RADIONUCLIDE SOLUBILITY.
PUBLISH P. 80-81. Chemistry and Migration Behavior of Actini Fission Products in the Geosphere. Abstracts. 1987.
DATE 87/00/00
ABSTRACT Published in summary form only.

KEYWORDS	RADIONUCLIDE MIGRATION: thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Polzer, W.L.; Fuentes, H.R.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	THE USE OF A HETEROGENEITY BASED ISOTHERM TO INTERPR
PUBLISH	TRANSPORT OF REACTIVE RADIONUCLIDES IN VOLCANIC TUFF
DATE	1987. 19 p.
ABSTRACT	87/00/00 The sorption of cesium and strontium has been modele heterogeneity based isotherm equation for various tu including those within a sequence of geologic strati units. The theory of the isotherm foresees the relat retardation and the chemical dispersion of the studi
KEYWORDS	radionuclides during the transport.
LOCATION	RADIONUCLIDE MIGRATION: tuff.
REFERENCE	
AUTHOR	Pigford, T.H. (Univ. Of California, Berkeley)
TYPE	acad
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	THRESHOLD TEMPERATURE GRADIENT EFFECT ON MIGRATION O
PUBLISH	INCLUSIONS IN SALT.
DATE	p. 25. Proceedings of Salt Repository Project's Work
ABSTRACT	Migration. March 1987. 87/03/00 Theories on the migration of brine inclusions in sal interpreted as simple physical processes, and theori Russian and US workers were shown to yield the same migration theory was used to predict threshold tempe gradients below which migration of brine inclusions occur.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Kang, C.H.; Chambre, P.L.; Lee, W.W.L.; Pigford, T.H
TYPE	govt
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	TIME DEPENDENT NUCLIDE TRANSPORT THROUGH BACKFILL IN
PUBLISH	FRACTURE.
DATE	June 1987. 7 p.
ABSTRACT	87/06/00 This paper presents a transient analysis of radionuc transport through backfill into a fissure.
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	
AUTHOR	Ittner, T.; Torstenfelt, B. (Chambers Univ., Sweden)
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
TITLE	Radiochemie; Commission of the European Communities,
PUBLISH	(Belgium).
DATE	TRACE ELEMENT MIGRATION INTO WATER EXPOSED GRANITIC
	P. 25. Chemistry and Migration Behavior of Actinides
	Products in the Geosphere. Abstracts. 1987. 196 p.
	87/00/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Published in summary form only.
RADIONUCLIDE MIGRATION: geology.

AUTHOR

Hadermann, J.; Hoehn, E. (Eidgenoessisches Inst. fue
Reaktorforschung, Switzerland); Frick, U. (Nationale

TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Genossenschaft fuer die Lagerung Radioaktiver Abfael
Switzerland).

TRACER MIGRATION EXPERIMENT AT SWISS ROCK LABORATORY
Nucl. Eur. March 1987. V. 7(3-4) P.43.

87/03/00

Switzerland's national cooperative for the storage o
waste is performing an extensive research program on
topics of interest for safety assessments at the und
Grimsel Rock laboratory in central Switzerland.

RADIONUCLIDE MIGRATION: safety analysis.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Juznic, K. (Ljubljana Univ. Yugoslavia. J. Stepohan
acad

Technische Univ. Muenchen, Garching, Germany, F.R. I
Radiochemie; Commission of the European Communities,
(Belgium).

TITLE

TRANSFER OF RADIOCESIUM AND THE EQUILIBRIA IN A NATU
ZEOLITE-WATER SYSTEM.

PUBLISH

P. 93. Chemistry and Migration Behavior of Actinides
Products in the Geosphere. Abstracts. 1987. 196 p.

DATE

87/00/00

ABSTRACT

Published in summary form only.

KEYWORDS

RADIONUCLIDE MIGRATION:

LOCATION
REFERENCE

AUTHOR

Chambre, P.L.; Lee, W.W.L.; Kim, C.L.; Pigford, T.H.
Berkeley Lab., CA).

Bates, J.K.; Seefeldt, W.B. (eds.).

TYPE
ORGANIZATION

priv

Argonne National Lab. Il (USA).

TITLE

TRANSIENT AND STEADY-STATE RADIONUCLIDE TRANSPORT TH
PENETRATIONS IN NUCLEAR WASTE CONTAINERS.

PUBLISH

P. 131-140. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00

DATE

ABSTRACT

In this paper they analyze the transport of radionuc
penetrations in nuclear waste containers.

KEYWORDS
LOCATION
REFERENCE

RADIONUCLIDE MIGRATION: containment.

AUTHOR
TYPE
ORGANIZATION
TITLE

acad

TRANSIENT DIFFUSIONAL RELEASE FROM WASTE PACKAGES IN
IN BASALT.

PUBLISH

Nuclear Waste Management Symposium. Stockholm (Swede

DATE	9-11, 1985. p. 779.
ABSTRACT	85/09/00
KEYWORDS	
LOCATION	RADIONUCLIDE MIGRATION: containment, basalt.
REFERENCE	
AUTHOR	Glasbergen, P.; De Greef, E.; Hassanizideh, S.M. (RI
TYPE	Bilthoven, Netherlands) (and others)
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	TRANSPORT BY GROUNDWATER OF RADIONUCLIDES RELEASED A
PUBLISH	OF A REPOSITORY IN A SALT DOME.
DATE	1987. 66 p.
ABSTRACT	87/00/00 The transport of radionuclides in geological media b
KEYWORDS	high salinity is studied with the especially-develop
LOCATION	computer code (method for the transport of pollutant
REFERENCE	RADIONUCLIDE MIGRATION: groundwater.
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	TRANSPORT OF ANTHROPOGENIC RADIONUCLIDES IN THE UPPE
PUBLISH	OF THE SAVANNAH RIVER.
DATE	Clemson University Water Resources Research Inst. Re
ABSTRACT	June 86. 78 p.
KEYWORDS	86/06/00
LOCATION	RADIONUCLIDE MIGRATION:
REFERENCE	
AUTHOR	Lung, H.C.; Chambre, P.L.; Pigford, T.H.; Lee, W.W.L
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	TRANSPORT OF RADIOACTIVE DECAY CHAINS IN FINITE AND
PUBLISH	POROUS MEDIA.
DATE	September 1987. 101 p.
ABSTRACT	87/09/00 This report presents analytical solutions, numerical
KEYWORDS	implementation and numerical illustrations for the t
LOCATION	radioactive decay chains of arbitrary length in poro
REFERENCE	limited and unlimited extent.
	RADIONUCLIDE MIGRATION:
AUTHOR	Hassanizadeh, S.M. (National Institute for Public He
	Environmental Hygiene (RIVM), Leidschendam, Netherla

TYPE	govt
------	------

ORGANIZATION	Argonne National Lab. Il (USA).
TITLE	TRANSPORT OF RADIONUCLIDES BY CONCENTRATED BRINE IN MEDIUM WITH MICROPORE-MACROPORE STRUCTURE.
PUBLISH	P. 757-767. Scientific Basis for Nuclear Waste Manag
DATE	Pittsburgh, PA (USA). Materials Research Society. 19
ABSTRACT	87/00/00 This work concerns itself with the study of effects aggregation and high salt concentrations on the tran radionuclides by concentrated brine flowing through aggregated porous medium.
KEYWORDS	RADIONUCLIDE MIGRATION: salt.
LOCATION	
REFERENCE	
AUTHOR	Ahn, J.; Chambre, P.L.; Pigford, T.H.; Lee, W.L. (Un
TYPE	California, Berkeley).
ORGANIZATION	acad
TITLE	TRANSPORT OF RADIONUCLIDES RELEASED FROM A MULTIPLE- INTO A PLANAR FRACTURE WITH TRANSVERSE HYDRODYNAMIC
PUBLISH	Trans. Am. Nucl. Soc. 1987. V. 54 P.107-108.
DATE	87/00/00
ABSTRACT	Fractures are considered a main path for hydrologica of radionuclides released in a geologic repository. actual fractures form a complex network, single-frac transport models are useful in predicting travel tim concentrations of released nuclides.
KEYWORDS	RADIONUCLIDE MIGRATION: fractures, hydrology, modell
LOCATION	
REFERENCE	
AUTHOR	Van Luik, A.E.; Apted, M.J.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	US DEPARTMENT OF ENERGY APPROACHES TO THE ASSESSMENT RADIONUCLIDE MIGRATION FOR THE GEOLOGIC REPOSITORY P
PUBLISH	Radioact. Waste Manage. Nucl. Fuel Cycle. May 1988. 267-283..; P. 189-190. Chemistry and Migration Behav Actinides and Fission Products in the Geosphere. Abs 1987. 196 p. (Summary form).
DATE	87/09/00
ABSTRACT	Potential radionuclide migration in geologic reposit being addressed. Geohydrologic settings being invest include unsaturated tuff, saturated basalt, and bedd
KEYWORDS	RADIONUCLIDE MIGRATION: tuff, basalt, salt.
LOCATION	
REFERENCE	
AUTHOR	Hunter, T.O.; Muller, A.B., (ed.).
TYPE	assoc
ORGANIZATION	OECD Nuclear Energy Agency.
TITLE	WORKSHOP ON THE SOURCE TERM FOR RADIONUCLIDE MIGRATI HIGH-LEVEL WASTE OR SPENT NUCLEAR FUEL UNDER REALIST REPOSITORY CONDITIONS.
PUBLISH	1985. 203 p.
DATE	85/00/00
ABSTRACT	
KEYWORDS	RADIONUCLIDE MIGRATION:
LOCATION	
REFERENCE	

• •

• •

Job PILONLPCFS213359 (925) queued to LASER 2 on 18-OCT-1990 21:34 by user PILONL started on printer LTA2: on 18-OCT-1990 21:36 from queue LASER 2.

[illegible]

AUTHOR	govt
TYPE	
ORGANIZATION	Battelle Memorial Inst. Columbus, OH. Office of Nucl Isolation.
TITLE	EXPECTED NEAR-FIELD THERMAL PERFORMANCE FOR NUCLEAR REPOSITORIES AT POTENTIAL SALT SITES.
PUBLISH	Battelle Memorial Inst. Report ONWI-652. August 1987
DATE	87/08/00
ABSTRACT	
KEYWORDS	THERMODYNAMICS: salt.
LOCATION	
REFERENCE	

AUTHOR	McAssey, E.V.; Schrock, V.E.
TYPE	
ORGANIZATION	
TITLE	HEAT TRANSFER PROBLEMS IN NUCLEAR WASTE MANAGEMENT.
PUBLISH	New York, NY. American Society of Mechanical Engineer p. HTD-Vol.67
DATE	87/00/00
ABSTRACT	This book contains five selections. They include: he aspects of nuclear waste disposal; natural convection porous layer locally heated from below; thermal-hydr analysis of spent fuel storage systems; an experimen analytical evaluation of a type B radioactive transp container; and theoretical evaluation of consolidate temperature in spent fuel storage canister.
KEYWORDS	THERMODYNAMICS: containment.
LOCATION	
REFERENCE	

AUTHOR	govt
TYPE	
ORGANIZATION	
TITLE	POST-TEST THERMOMECHANICAL CALCULATIONS AND PRELIMIN ANALYSIS FOR THE SPENT FUEL TEST-CLIMAX.
PUBLISH	LLNL Report UCRL-53688. September 1985. 59 p.
DATE	85/09/00
ABSTRACT	
KEYWORDS	THERMODYNAMICS:
LOCATION	
REFERENCE	

AUTHOR	Van Sambeek, L.L.
TYPE	priv
ORGANIZATION	RE/SPEC, Inc. Rapid City, SD (USA).
TITLE	THERMAL AND THERMOMECHANICAL ANALYSES OF WIPP SHAFT TOPICAL REPORT RSI-0324.
PUBLISH	October 1987. 91 p.
DATE	87/10/00
ABSTRACT	Thermal and thermomechanical analyses provided infor behavior and stability of concrete seals emplaced in

KEYWORDS	shaft. Thermal analyses determined the temperature r concrete and surrounding rock as a result of the exo hydration of the cement in the concretes.
	THERMODYNAMICS:

AUTHOR	Beavan, G.
TYPE	govt
ORGANIZATION	Department of the Environment. (UK).
TITLE	'WISP' A SIMPLE RADIOACTIVE WASTE MANAGEMENT COMPUTE
PUBLISH	December 1987. 26 p.
DATE	87/12/00
ABSTRACT	The report describes the radioactive waste management WISP.
KEYWORDS	ANALYTICAL TECHNIQUES:
LOCATION	
REFERENCE	

AUTHOR	Richter, S.A.; Travis, C.C.
TYPE	acad
ORGANIZATION	
TITLE	A REMEDIAL ALTERNATIVE PRIORIZATION METHOD.
PUBLISH	American Institute of Chemical Engineers. 1987. 15 p
DATE	87/00/00
ABSTRACT	This study develops and tests a technique for evaluating prioritizing alternative remedial actions for hazardous sites. The method is based on criteria involving risk benefit and cost.
KEYWORDS	ANALYTICAL TECHNIQUE: risk analysis, economics.
LOCATION	
REFERENCE	

AUTHOR	Hale, H.J. (US Dept. Of Energy, Office of Civilian R Waste Management, Washington, DC)
TYPE	Post, R.G. (ed.).
ORGANIZATION	govt
TITLE	APPLICATIONS OF SYSTEM ENGINEERING TO CIVILIAN RADIO MANAGEMENT PROGRAM.
PUBLISH	P.3-8. Waste Management '87: Waste Isolation in the Programs, and Public Education. Tucson, AZ. University of Arizona Nuclear Engineering Dept. 1987
DATE	87/00/00
ABSTRACT	This paper discusses the unique features of the waste problem and the application of systems engineering to requirements of these features.
KEYWORDS	ANALYTICAL TECHNIQUES: engineering, waste management
LOCATION	
REFERENCE	

AUTHOR	Liebetrau, A.M.; Apted, M.J.; Engel, D.W.; Altenhofe Reid, C.R.; Strachan, D.M.; Erikson, R.L.; Alexander (Pacific Northwest Lab., WA)
TYPE	Post, R.G. (ed.)
ORGANIZATION	priv
TITLE	AREST: A PROBABILISTIC SOURCE-TERM CODE FOR WASTE PERFORMANCE ANALYSIS.

PUBLISH	P. 535-544. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00

ABSTRACT	The engineered barrier system is the first of several and natural barriers to the release and migration of wastes from a geologic repository to the accessible
KEYWORDS	ANALYTICAL TECHNIQUES: containment, geologic disposal
LOCATION	
REFERENCE	
AUTHOR	Pin, F.G. (Oak Ridge National Lab., Oak Ridge, TN)
TYPE	Chu, S.L. (ed.)
ORGANIZATION	govt
TITLE	AUTOMATED SENSITIVITY ANALYSIS: NEW TOOL FOR MODELING DYNAMIC SYSTEMS.
PUBLISH	P. 305-312. Energy Solutions Today for the Nineties.
DATE	NY. American Society of Civil Engineers. 1987.
ABSTRACT	87/00/00 Sensitivity analysis is an established methodology used by researchers in almost every field to gain essential design and modelling studies and in performance assessment of complex systems.
KEYWORDS	ANALYTICAL TECHNIQUES: modelling, decision making.
LOCATION	
REFERENCE	
AUTHOR	Brauer, F.P.; Conners, D.A.; Deichman, J.L.; Johnson
TYPE	Routson, R.C.
ORGANIZATION	priv
TITLE	Westinghouse Hanford Co., Richland, WA (USA).
PUBLISH	DATA COMPILATION: IODINE-129 IN HANFORD GROUNDWATER.
DATE	August 1987. 375 p.
ABSTRACT	87/08/00 This report summarizes all data and information about Hanford site groundwater that could be gathered from diverse sources.
KEYWORDS	ANALYTICAL TECHNIQUES: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Bonano, E.J.; Davis, P.A.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	DEMONSTRATION OF A PERFORMANCE ASSESSMENT METHODOLOGY FOR WASTE ISOLATION IN BASALT FORMATIONS.
PUBLISH	1988. 19 p.
DATE	88/00/00
ABSTRACT	This paper summarizes the results of the demonstration of performance assessment methodology developed by Sandia Labs, for the US Nuclear Regulatory Commission for use in
KEYWORDS	analysis of high-level radioactive waste disposal in basalts.
LOCATION	ANALYTICAL TECHNIQUES: basalt, geology, modelling.
REFERENCE	
AUTHOR	Worley, B.A.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	DETERMINISTIC UNCERTAINTY ANALYSIS.
PUBLISH	December 1987. 53 p.
DATE	87/12/00
ABSTRACT	This paper presents a deterministic uncertainty analysis

KEYWORDS	for calculating uncertainties that has the potential
LOCATION	significantly reduce the number of computer runs com
REFERENCE	conventional statistical analysis.
	ANALYTICAL TECHNIQUES: risk analysis.
AUTHOR	Croff, A.G.; Forsberg, C.W.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	DEVELOPMENT AND APPLICATION OF A CONCEPTUAL APPROACH
	HIGH-LEVEL WASTE.
PUBLISH	1986. 20 p.
DATE	86/00/00
ABSTRACT	
KEYWORDS	ANALYTICAL TECHNIQUES: waste characterization.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	priv/govt
ORGANIZATION	Department of the Environment, London; Taylor Woodro
	Construction Ltd., Southall, (UK).
TITLE	DEVELOPMENT OF THE DESIGN AND RELIABILITY ANALYSIS O
	REPOSITORY SYSTEM. FINAL REPORT.
PUBLISH	June 1987. 174 p.
DATE	87/06/00
ABSTRACT	This study examines the seabed repository scheme pro
	for the long-term disposal of heat generating radioa
	and develops it to a standard sufficient to compare
	reliability with the drilled emplacement and penetra
KEYWORDS	ANALYTICAL TECHNIQUES: marine disposal.
LOCATION	
REFERENCE	
AUTHOR	Lotz, T.L.; Shay, M.R.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	FACSIM/MRS-1: CASK RECIEVING AND CONSOLIDATION PERFO
PUBLISH	ASSESSMENT.
DATE	June 1987. 550 p.
ABSTRACT	87/06/00
	A simulation analysis was completed to assess the pe
	the shipping cask, recieving and spent-fuel handling
	consolidation and canistering operations of the moni
	retrievable storage facility.
KEYWORDS	ANALYTICAL TECHNIQUES: waste handling and emplacemen
	containment, cask.
LOCATION	
REFERENCE	
AUTHOR	Teper, B.
TYPE	
ORGANIZATION	
TITLE	FEASIBILITY ASSESSMENT OF THE PARTICULATE-PACKED, TH
	CONTAINER.
PUBLISH	Nineteenth Information Meeting of the Nuclear Fuel W
	Management Program. Atomic Energy of Canada Ltd. Tec
	Record TR-350. V. I. Sept. 1985. p. 21-32.
DATE	85/09/00
ABSTRACT	

KEYWORDS	ANALYTICAL TECHNIQUES: containment.
LOCATION	
REFERENCE	
AUTHOR	Haase, C.S.
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	Oak Ridge National Lab. TN (USA). GEOPHYSICAL DATA FROM BOREHOLES DM1, DM2, DM3, AND D HYDRAULIC FRACTURING FACILITY, OAK RIDGE NATIONAL LA OAK RIDGE, TENNESSEE. March 1987. 107 p. 87/03/00 A comprehensive suite of geophysical logs was obtain deep monitoring boreholes at the new hydrofracture f logging was an attempt to obtain stratigraphic, stru hydrologic information on the subsurface environment the hydrofracture facility. ANALYTICAL TECHNIQUES: geology.
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Harlan, C.P.; Wikinon, G.F.
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	Sandia National Lab. NM (USA). HIGH-LEVEL WASTE MANAGEMENT CODE MAINTENANCE AND QUA ASSURANCE. January 1988. 51 p. 88/01/00 The US Nuclear Regulatory Commission has the respons licensing sites for future disposal of commercial hi
DATE	
ABSTRACT	
KEYWORDS	radioactive waste. Sandia National Labs is assisting this effort by developing and demonstrating performa assessment methodologies for evaluating high-level r waste repositories in deep geologic formations. ANALYTICAL TECHNIQUES: disposal and storage alternat
LOCATION	
REFERENCE	
AUTHOR	Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E. S.P.; Rajen, G.; Kulacki, F.A.
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	Colorado State University. CO (USA). HYDROTHERMAL IMPACT OF A HIGH-LEVEL NUCLEAR WASTE RE Rock Mechanics: Proceedings of the 28th US Symposium 1987. 755-762. 87/00/00 A numerical and experimetnal study of thermal convec porous layer partially heated from below is presente ANALYTICAL TECHNIQUES: geology.
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	Stephensen, D.E.; King, C.M.
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	Savannah River Lab. SC (USA). METHODOLOGY FOR PREDICTIVE MODELLING OF ENVIRONMENTA AND HEALTH EFFECTS FOR WASTE SITES AT THE SAVANNAH R ENVIRONMENTAL INFORMATION DOCUMENT. March 1987. 71 p. 87/03/00 This document provides information on the methods us
DATE	
ABSTRACT	

KEYWORDS
LOCATION
REFERENCE

chemical transport and the associated health risk for
postulated closure activities at waste sites.

ANALYTICAL TECHNIQUES: health, radionuclide migration

AUTHOR
TYPE
ORGANIZATION
TITLE

Arulmoli, K.; St John, C.M.

govt

Sandia National Lab. NM (USA).

NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT:
HORIZONTAL WASTE EMPLACEMENT BOREHOLES OF A NUCLEAR
REPOSITORY IN TUFF.

PUBLISH
DATE
ABSTRACT

March 1987. 98 p.

87/03/00

In support of the design of a nuclear waste repository,
two dimensional thermal and thermal-mechanical analyses
horizontal emplacement boreholes were performed using
finite-element and boundary-element codes.

KEYWORDS
LOCATION
REFERENCE

ANALYTICAL TECHNIQUES: glass, geologic disposal.

AUTHOR
TYPE
ORGANIZATION
TITLE

Blanford, M.L.; Osnes, J.D.

govt

Sandia National Lab. NM (USA).

NUMERICAL ANALYSES OF THE G-TUNNEL SMALL-DIAMETER HEAT
EXPERIMENTS.

PUBLISH
DATE
ABSTRACT

May 1987. 149 p.

87/05/00

The experiments, conducted by Sandia National Labs.,
in two phases. Heaters were placed in vertical boreholes
data gathered on the heat transfer. This report summarizes
finite element heat transfer analyses of the two phase
experiments.

KEYWORDS
LOCATION
REFERENCE

ANALYTICAL TECHNIQUES: monitoring.

AUTHOR
TYPE
ORGANIZATION
TITLE

Chaturvedi, L.; Chapman, J.B.; Neill, R.H.; Channell
(Environmental Evaluation Group, State of New Mexico
NM)

Post, R.G. (ed.)

govt

PERFORMANCE ASSESSMENT FOR A NUCLEAR WASTE REPOSITORY
EXPERIENCE.

PUBLISH

P. 141-146. Waste Management '87: Waste Isolation in
Technical Programs, and Public Education. Tucson, AZ
of Arizona Nuclear Engineering Dept. 1987.

DATE
ABSTRACT

87/00/00

Performance assessment to show compliance with the standards
a nuclear waste repository requires thorough site
characterization and understanding of potential path
breach of the repository.

KEYWORDS
LOCATION
REFERENCE

ANALYTICAL TECHNIQUES: siting.

AUTHOR

Aparo, M.; Dionisi, M.; Mattia, B.; Zeppa, P.; Angeli
Baldini, E.; Sardo, I.; Frazzoli, F.V.

TYPE

govt

ORGANIZATION	ENEA, (Italy).
TITLE	PERFORMANCE STUDY OF DEXA DENSITOMETER FOR THE ASSAY URANIUM-PLUTONIUM MIXED SOLUTIONS.
PUBLISH	ENEA-RT-COMB--87-4.
DATE	87/04/00
ABSTRACT	The present work has been carried out in view of a p installation of a densitometer, at Eurex reprocessing plant, aimed to in-line control of the product stream partial partition cycle, during the reprocessing campaign Trino Cruciforme spent fuels. Experimental results of measurement campaign, carried out with dexameters at plutonium plant are reported.

KEYWORDS	ANALYTICAL TECHNIQUES: chemistry.
LOCATION	
REFERENCE	

AUTHOR	Saltelli, A.
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	PERFORMANCES OF NON-PARAMETRIC STATISTICS IN SENSITIVITY AND PARAMETER RANKING.
PUBLISH	1987. 60 p.
DATE	87/00/00
ABSTRACT	Twelve parametric and non-parametric sensitivity analysis techniques are compared in the case of non-linear model responses. The test models used are taken from the 1 risk analysis for the disposal of high level radioactive waste in a geological disposal.
KEYWORDS	ANALYTICAL TECHNIQUES: risk analysis, geologic disposal
LOCATION	
REFERENCE	

AUTHOR	Preece, D.S.
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).
TITLE	PRETEST 3-D FINITE ELEMENT MODELLING OF THE WEDGE PORTION OF THE WIPP GEOMECHANICAL EVALUATION (ROOM G) IN SITU EXPERIMENT.
PUBLISH	June 1987. 57 p.
DATE	87/06/00
ABSTRACT	Pretest 3-D finite element calculations have been performed on the wedge pillar portion of the WIPP geomechanical evaluation experiment. The purpose of the experiment is to provide the creep behaviour of the wedge and progressive failure tip.
KEYWORDS	ANALYTICAL TECHNIQUES: geology.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Institute, OH (USA). Office of Nuclear Isolation.
TITLE	PROBABLE MAXIMUM FLOOD ANALYSIS, RICHTON DOME, MISSISSIPPI: TECHNICAL REPORT.
PUBLISH	March 1987. 30 p.
DATE	87/03/00
ABSTRACT	This report presents results of a preliminary analysis of the extent of inundation that would result from a probable flood (PMF) event in the overdome area of the Richton Dome.
KEYWORDS	ANALYTICAL TECHNIQUES:

LOCATION
REFERENCE

<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE</p>	<p>Unger, M.; Mainka, E.; Koenig, W. govt Kernforschungszentrum Karlsruhe G.M.B.H. (FRG). QUANTITATIVE DETERMINATION OF EDTA AND ITS BEHAVFIOU RADIOACTIVE WASTE SOLUTIONS USING HPLC. Fresenius' Z. Anal. Chem. Nov. 1987. V. 329(1) p. 50 87/11/00 A new analytical method for the quantitative determi EDTA in radioactive waste solutions is described. ANALYTICAL TECHNIQUES: waste characterization.</p>
<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION REFERENCE</p>	<p>Farmer, I.W.; Daemen, J.J.; Desai, C.S.; Glass, C.E. S.P.; Donovan, K.S.; Lehman, G.A.; Pearce, R.S.; Kim govt Rockwell Hanford Operations. WA (USA). RATIONALE FOR DEVELOPMENT OF CONSTITUTIVE MODELS OF MASS FOR DESIGN OF A NUCLEAR WASTE REPOSITORY AT THE SITE. Rock Mechanics: Proceedings of the 28th US Symposium 1987. p. 715-724. 87/00/00 Development of constitutive laws for the disposal of waste at the Hanford site, is necessary for modellin used to evaluate the repository design and to evalua ability of the repository to contain radioactive was several thousand years. This paper evaluates four an techniques that have been used in previous analyses repository in basalt and presents a strategy for fur development of constitutive models. ANALYTICAL TECHNIQUES:</p>
<p>AUTHOR TYPE ORGANIZATION TITLE PUBLISH DATE ABSTRACT KEYWORDS LOCATION</p>	<p>Corbett, J.O. govt/assoc Central Electricity Generating Board, Berkeley (UK). RISK ASSESSMENT METHODS FOR RADIOACTIVE WASTE DISPOS ASSOCIATED WITH THE ANNUAL RISK APPROACH AND HOW TO March 1987. 25 p. 87/03/00 It is shown that the method of assessing radioactive disposal options in terms of the annual risk to the group can lead to anomalous results, in which the ri artificially diluted by averaging it over a number o generations, most of whom are actually unaffected. A alternative approach is proposed, based on the stati expectation value of the lifetime risk to the critic which is not subject to this problem. ANALYTICAL TECHNIQUES: risk analysis.</p>

REFERENCE

AUTHOR	Knighton, R.E.; Wagenet, R.J.;
TYPE	govt/acad
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	SIMULATION OF ION MOVEMENT IN SOIL USING A CONTINUOU PROCESS.
PUBLISH	Modelling Study of Solute Transport in the Unsaturat Workshop Proceedings. April 1987. p. 37-81.
DATE	87/04/00
ABSTRACT	Simulation of solute transport using a continuous-ti process is a new approach for modelling chemical mov soils. The authors describe the model and apply it t results of tracer experiments on the transport of io bromine, strontium and lithium in Bandalier Tuff.
KEYWORDS	ANALYTICAL TECHNIQUES: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Prindle, R.W.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	SPECIFICATION OF A TEST PROBLEM FOR HYDROCOIN (HYDRO INTERCOMPARISON) LEVEL 3 CASE 2: SENSITIVITY ANALYSI DISPOSAL IN PARTIALLY SATURATE, FRACTURED TUFF.
PUBLISH	Aug. 1987. 37 p.
DATE	87/08/00
ABSTRACT	The International hydrologic code intercomparison pr (Hydrocoin) was formed to evaluate hydrogeologic mod computer codes and their use in performance assessme high-level radioactive waste repositories.
KEYWORDS	ANALYTICAL TECHNIQUES:
LOCATION	
REFERENCE	
AUTHOR	Apted, M.J.; Liebetrau, A.M.; Engel, D.W. (Pacific N Lab., Richland, WA)
TYPE	Post, R.G. (ed.)
ORGANIZATION	priv
TITLE	SPENT FUEL AS A WASTE FORM: ANALYSIS WITH AREST PERF ASSESSMENT CODE.
PUBLISH	P. 545-554. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	The release of radionuclides from spent fuel has bee for three different repository sites and waste packa
KEYWORDS	ANALYTICAL TECHNIQUES: containment, radionuclide mig
LOCATION	
REFERENCE	
AUTHOR	Plodinec, M.J.; Jantzen, C.M.; Wicks, G.
TYPE	acad
ORGANIZATION	
TITLE	STABILITY OF RADIOACTIVE WASTE GLASSES ASSESSED FROM THERMODYNAMICS.

PUBLISH	Materials Research Society Symposia Proceedings 26:
DATE	84/00/00
ABSTRACT	
KEYWORDS	ANALYTICAL TECHNIQUES: glass, thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Pulsipher, B.A.; Kuhn, W.L.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	STATISTICAL PROCESS CONTROL APPLIED TO THE LIQUID-FE
	MELTER PROCESS.
PUBLISH	September 1987. 41 p.
DATE	87/09/00
ABSTRACT	In this report, an application of control charts to
	feed composition of a liquid-fed ceramic melter is d
	by using results from a simulation of the LFCM syste
KEYWORDS	ANALYTICAL TECHNIQUES: ceramics.
LOCATION	
REFERENCE	
AUTHOR	Tjus, K.
TYPE	govt
ORGANIZATION	Institute for Surface Chemistry. (Sweden).
TITLE	STUDY OF GROUNDWATER COLLOIDS AND THEIR ABILITY TO T
	RADIONUCLIDES.
PUBLISH	March 1987. 30 p.
DATE	87/03/00
ABSTRACT	Natural occurring colloids in groundwater can adsorb
	transport released radionuclides. In this work, grou
	colloids have been investigated with Zeta potential
	and dynamic light scattering.
KEYWORDS	ANALYTICAL TECHNIQUES: groundwater, radionuclide mig
LOCATION	
REFERENCE	
AUTHOR	Stormont, J.C.; Peterson, E.W.; Lagus, P.L.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	SUMMARY OF AND OBSERVATIONS ABOUT WIPP FACILITY HORI
	MEASUREMENTS THROUGH 1986.
PUBLISH	May 1987. 75 p.
DATE	87/05/00
ABSTRACT	Numerous gas flow measurements have been made at the
	facility horizon from 1984 through 1986. Results of,
	recommedations and conclusions, are presented in thi
KEYWORDS	ANALYTICAL TECHNIQUES:
LOCATION	
REFERENCE	
AUTHOR	Gascoyne, M.; Vandergraaf, T.T.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	SUMMARY OF DISCUSSION AT THE CONFERENCE ON ISOTOPE G
	OF GROUNDWATER AND FRACTURE MATERIAL IN PLUTONIC ROC
	MARIE, QUEBEC, CANADA, 1-3 OCTOBER, 1986.
PUBLISH	Applied Geochemistry. Jan-Feb. 1987. V. 2(1) p. 137-
DATE	87/01/00
ABSTRACT	In the discussions on groundwater dating, isotopes g
	and dissolved gases, there was a consensus that the
	of a groundwater cannot be determined. No single is

KEYWORDS	dating method stands out.
LOCATION	ANALYTICAL TECHNIQUES: groundwater.
REFERENCE	
AUTHOR	Crick, M.J.; Hill, M.D. (National Radiological Protection Commission (UK)) (and others).
TYPE	govt
ORGANIZATION	Nuclear Energy Agency. 75 - Paris (France).
TITLE	THE ROLE OF SENSITIVITY ANALYSIS IN ASSESSING UNCERTAINTY
PUBLISH	P. 116-129. Uncertainty Analysis for Performance Assessment of Radioactive Waste Disposal Systems. Proceedings of an NEA Workshop. Paris (France). Organisation for Economic Co-operation and Development. 258 p.
DATE	87/00/00
ABSTRACT	This paper reviews approaches to sensitivity analysis in the context of assessing uncertainty, and outlines the test available to identify sensitive parameters, together with their advantages and disadvantages.
KEYWORDS	ANALYTICAL TECHNIQUES:
LOCATION	
REFERENCE	
AUTHOR	Plodinec, M.J.; Jantzen, C.M.; Wicks, G.
TYPE	acad
ORGANIZATION	
TITLE	THERMODYNAMIC APPROACH TO PREDICTION OF THE STABILITY OF RADIOACTIVE WASTE GLASSES.
PUBLISH	Advances in Ceramics 8: 491-495.
DATE	84/00/00
ABSTRACT	
KEYWORDS	ANALYTICAL TECHNIQUES: thermodynamics, glass.
LOCATION	
REFERENCE	
AUTHOR	Duffy, C.J.; Al-Hassan, S.
TYPE	govt/acad
ORGANIZATION	
TITLE	Los Alamos National Lab. NM (USA). TIME AND FREQUENCY DOMAIN ANALYSIS OF TRACER MIGRATION IN TUFF.
PUBLISH	Modelling Study of Solute Transport in the Unsaturated Zone. Workshop Proceedings. April 1987. p. 82-116.
DATE	87/04/00
ABSTRACT	The time moment method as presented by Valocchi (85) and Himmelbauer (70) is compared with the frequency and domain methods for transport parameter estimation for the Los Alamos Cais experiments.
KEYWORDS	ANALYTICAL TECHNIQUES: tuff, radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Gee, J.H.
TYPE	govt
ORGANIZATION	Ontario Hydro, Design and Development Division.
TITLE	Preliminary Environmental and Safety Assessment of the Nuclear Fuel Waste Management Concept: Pre-Closure Phase 2-Support Documents.
PUBLISH	Toronto. 1983, 700p.
DATE	83/00/00
ABSTRACT	A collection of social impact, occupational safety and health studies.

AUTHOR	Mehta, K.
TYPE	acad
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	A PROPOSED RISK ACCEPTANCE CRITERION FOR NUCLEAR FUEL DISPOSAL.
PUBLISH DATE	Technical Report, 8378. 85/00/00
ABSTRACT	
KEYWORDS	RISK ANALYSIS: disposal and storage alternatives.
LOCATION	
REFERENCE	

AUTHOR	Gralewski, Z.A.; Kane, P.; Nicholls, D.B. (Electrowa Engineering Services Ltd., Horsham, UK)
TYPE	priv
ORGANIZATION	Department of the Environment. London (UK).
TITLE	DEVELOPMENT OF A METHODOLOGY FOR POST-CLOSURE RADIOLOGICAL ANALYSIS OF UNDERGROUND WASTE REPOSITORIES. ILLUSTRATION OF THE HARWELL SITE. V.2. APPENDICES.
PUBLISH DATE	June 1987. 199 p. 87/06/00
ABSTRACT	A probabilistic risk analysis is demonstrated for a groundwater mediated release scenarios at the Harwell hypothetical repository at a depth of about 150 m. The second stage of development of an overall risk assessment methodology.
KEYWORDS	RISK ANALYSIS: groundwater.
LOCATION	
REFERENCE	

AUTHOR	Gralewski, Z.A.; Kane, P.; Nicholls, D.B. (Electrowa Engineering Services Ltd., Horsham, UK)
TYPE	priv
ORGANIZATION	Department of the Environment. London (UK).
TITLE	DEVELOPMENT OF A METHODOLOGY FOR POST-CLOSURE RADIOLOGICAL ANALYSIS OF UNDERGROUND WASTE REPOSITORIES. ILLUSTRATION OF THE HARWELL SITE. V.1.
PUBLISH DATE	June 1987. 353 p. 87/06/00
ABSTRACT	A probabilistic risk analysis is demonstrated for a groundwater mediated release scenarios at the Harwell hypothetical repository at a depth of about 150 m. The second stage of development of an overall risk assessment methodology.
KEYWORDS	RISK ANALYSIS: groundwater.
LOCATION	
REFERENCE	

AUTHOR	Gralewski, Z.A.; Kane, P.; Nicholls, D.B. (Electrowa Engineering Services Ltd., Horsham, UK)
TYPE	priv
ORGANIZATION	Department of the Environment. London (UK).

TITLE	DEVELOPMENT OF A METHODOLOGY FOR POST-CLOSURE RADIOLOGICAL ANALYSIS OF UNDERGROUND WASTE REPOSITORIES. ILLUSTRATION OF THE HARWELL SITE. EXECUTIVE SUMMARY.
PUBLISH DATE	June 1987. 30 p.

DATE	87/06/00
ABSTRACT	A probabalistic risk analysis is demonstrated for a groundwater mediated release scenarios at the Harwel hypothetical repository at a depth of about 150 m. T second stage of development of an overall risk asses methodology.
KEYWORDS	RISK ANALYSIS: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Davis, J.D.; Runchal, A.K.
TYPE	priv/govt
ORGANIZATION	Rockwell Hanford Operations. WA (USA); Analytic & Co Research Inc. CA (USA).
TITLE	DISRUPTION SCENARIO ANALYSIS FOR A NUCLEAR WASTE REP HANFORD SITE BASALTS, WASHINGTON STATE.
PUBLISH	Waste Management Conference 1984. Tucson, AZ (USA). 1984. V. 1, p. 419-426.
DATE	84/03/00
ABSTRACT	The Delphi method of expert opinion consensus-formin to disruption scenario analyses of a candidate high-radioactive waste repository at the Hanford Site. Ex scientific and engineering opinion was elicited for and ranking of site-specific scenarios within the fr occurrence probability categories established by NRC
KEYWORDS	RISK ANALYSIS: other alternatives.
LOCATION	
REFERENCE	
AUTHOR	King, C.M.; Marter, W.L.; Looney, B.B.; Pickett, J.B
TYPE	govt
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	METHODOLOGY AND PARAMETERS FOR ASSESSING HUMAN HEALT WASTE SITES AT THE SAVANNAH RIVER PLANT: ENVIRONMENT INFORMATION DOCUMENT.
PUBLISH	March 1987. 390 p.
DATE	87/03/00
ABSTRACT	This report provides a summary of the components of assessment and presents the technical basis for appl the risk evaluation process to the principal polluta
KEYWORDS	RISK ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Green, Patrick
TYPE	assoc
ORGANIZATION	Friends of the Earth. (U.K.).
TITLE	OCCUPATIONAL EXPOSURE RISKS/ICRP LIMITS UNDER FIRE.
PUBLISH	FOE Trust, E-7, London, 1987, 20pp.
DATE	87/00/00
ABSTRACT	Comparison of risks in other industries with those f occupational radiation exposure.
KEYWORDS	RISK ANALYSIS: occupational exposure.
LOCATION	FOE, 26-28 Underwood St. London, N1 7JQ, U.K.
REFERENCE	anne
AUTHOR	Emel, Jacque; Kasperson, Roger E.; Goble, Robert; Re (Center for Technology, Environment and Development, University)
TYPE	acad
ORGANIZATION	Nuclear Waste Project Office, State of Nevada Agency

TITLE	Projects. (USA).
PUBLISH	POSTCLOSURE RISKS AT THE PROPOSED YUCCA MOUNTAIN REP
DATE	REVIEW OF THE METHODOLOGICAL AND TECHNICAL ISSUES.
ABSTRACT	NWPO-SE-011-88, Carson City, June, 1988, 55pp.
	86/06/00
	Insights into how the State of Nevada might view or
	Department of Energy efforts to estimate and charact
	post-closure repository risks. In general, risk ana
	is not sufficient to assess long-term risks of a was
	repository, or to design a successful risk managemen
	Proposes an alternative framework for risk assessmen
	management.
KEYWORDS	RISK ANALYSIS:
LOCATION	Capitol Complex, Carson City, Nevada 89710
REFERENCE	NFW 2.2-51-2
AUTHOR	Goble, R.; Golding, D.; Kasperson, R.
TYPE	govt
ORGANIZATION	Center for Technology, Environment, and Development,
	University.
TITLE	POTENTIAL RETRIEVAL OF RADIOACTIVE WASTES AT THE PRO
PUBLISH	MOUNTAIN REPOSITORY: A PRELIMINARY REVIEW OF RISK IS
DATE	June 1988. 44 p.
ABSTRACT	88/06/00
	This paper characterizes the risks of retrieval by
	causal risk sequences that lead to adverse consequen
	preclosure operations and site characteristics that
	the need for retrieval, 3) the conditions under whic
	would take place and, 4) the potential for the socia
	amplification of risk events.
KEYWORDS	RISK ANALYSIS: retrieval.
LOCATION	
REFERENCE	NFW 2.2-51-1
AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Inst. Columbus, OH. Office of Nucl
	Isolation.
TITLE	PRELIMINARY ANALYSES OF SCENARIOS FOR POTENTIAL HUMA
PUBLISH	INTERFERENCE FOR REPOSITORIES IN THREE SALT FORMATIO
DATE	Battelle Memorial Inst. Report ONWI-553. Oct. 1985.
ABSTRACT	85/10/00
KEYWORDS	
LOCATION	RISK ANALYSIS: public participation, geologic dispos
REFERENCE	
AUTHOR	Kasperson, R.E.; Emel, J.; Goble, R.; Hohenemser, C.
	J.X.; Renn, O. (Center for Technology, Environment a
	Development, Clark Univ., Worchester, MA)
	Post, R.G. (ed.)
TYPE	acad
ORGANIZATION	
TITLE	RADIOACTIVE WASTES AND THE SOCIAL AMPLIFICATION OF R
PUBLISH	P.85-90. Waste Management '87: Waste Isolation in th
	Technical Programs, and Public Education. Tucson, AZ
	of Arizona Nuclear Engineering Dept. 1987
DATE	87/00/00
ABSTRACT	This paper explores the issues involved in the socia
	amplification of risk, using the risk associated wit
	characterization as the example.

KEYWORDS	RISK ANALYSIS: siting, monitoring.
LOCATION	
REFERENCE	
AUTHOR	Freudenburg, W.R. (Univ. of Wisconsin, Madison, WI)
TYPE	Post, R.G. (ed.)
ORGANIZATION	acad
TITLE	RATIONALITY AND IRRATIONALITY IN ESTIMATING THE RISK
PUBLISH	WASTE DISPOSAL.
DATE	P. 109-116. Waste Management '87: Waste Isolation in
ABSTRACT	Technical Programs, and Public Education. Tucson, AZ
	of Arizona Nuclear Engineering Dept. 1987.
	87/00/00
	In addition to their intrinsic or 'academic' interes
	perceptions of risks have begun to receive increased
	attention for at least three reasons that are direct
	to waste disposal.
KEYWORDS	RISK ANALYSIS: public participation.
LOCATION	
REFERENCE	
AUTHOR	Cohen, B.L.
TYPE	acad
ORGANIZATION	
TITLE	RISK ANALYSIS OF BURIED WASTES FROM ELECTRICITY GENE
PUBLISH	American Journal of Physics 54(1): 38-45.
DATE	86/00/00
ABSTRACT	
KEYWORDS	RISK ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	King, C.M.; Marter, W.L.; Montague, D.F.; Holton, G.
TYPE	
ORGANIZATION	Savannah River Lab. SC (USA).
TITLE	RISK ASSESSMENT OF SOIL CONTAMINATION CRITERIA.
PUBLISH	June 1987. 25 p.
DATE	87/06/00
ABSTRACT	Criteria have been developed to select radioactive a
	nonradioactive contaminants at waste sites detailed
	assessment.
KEYWORDS	RISK ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Hansson, S.O.
TYPE	govt
ORGANIZATION	National Board for Spent Nuclear Fuel, Stockholm, (S
TITLE	RISK DECISIONS AND NUCLEAR WASTE.
PUBLISH	November 1987. 41 p.
DATE	87/11/00
ABSTRACT	The risk concept is multidimensional, and much of it
	lost in the conventional reduction to a unidimension
	quantifiable term. Eight major dimensions of the ris
	are discussed, among them the time factor and the la
	knowledge factor.
KEYWORDS	RISK ANALYSIS:
LOCATION	
REFERENCE	

AUTHOR	Emel, Jacque; Cook, Brian; Kasperson, Roger. (Center for Technology, Environment and Development, Clark University)
TYPE	
ORGANIZATION	Nuclear Waste Projects Office, State of Nevada Agency
TITLE	Projects.(USA). RISK MANAGEMENT AND ORGANIZATIONAL SYSTEMS FOR HIGH-RADIOACTIVE WASTE DISPOSAL; ISSUES AND PRIORITIES.
PUBLISH	Nuclear Waste Projects Office. NWPO-SE-008-88, Sept 87pp.
DATE	88/09/00
ABSTRACT	Public acceptance of risk depends more on public communication than on the quantitative estimates of consequences, probabilities and magnitudes. This report for comprehensive new risk management strategies, both and institutional, which seek to embrace uncertainty, suppress it, build in redundancy, and decentralize decision-making. Reviews current choices of management organization in the U.S. repository program.
KEYWORDS	RISK ANALYSIS:
LOCATION	Capitol Complex, Carson City, Nevada 89710
REFERENCE	NFW 2.2-51-3

AUTHOR	Cranwell, R.M.; Campbell, J.E.; Helton, J.C.; Iman, Longstine, D.E.; Ortiz, N.R.; Runkle, G.E.; Shortencorn
TYPE	
ORGANIZATION	Sandia National Lab. NM (USA).; Nuclear Regulatory Commission Washington DC (USA).
TITLE	RISK METHODOLOGY FOR GEOLOGIC DISPOSAL OF RADIOACTIVE WASTE. FINAL REPORT.
PUBLISH	Aug. 1987. 104 p.
DATE	87/08/00
ABSTRACT	This report contains risk assessment methodology developed for use in assessing the risk from the disposal of radioactive wastes in deep geologic formations.
KEYWORDS	RISK ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	

AUTHOR	Brown, J. (Wheal Pendarves Mine, Camborne).
TYPE	
ORGANIZATION	
TITLE	RISK PERCEPTION: EXPERT OPINION VERSUS PUBLIC UNDERSTANDING OF RADIOACTIVE WASTE REPOSITORIES).
PUBLISH	Econ. Soc. Res. Council. Newsl. February 1987. No.59. P. 1-5
DATE	87/02/00
ABSTRACT	A research project looking at the public's attitudes towards the siting of radioactive waste repositories is reported. Perception studies seek to compare expert and lay understanding of risk.
KEYWORDS	RISK ANALYSIS: siting, public participation.
LOCATION	
REFERENCE	

AUTHOR	Lewis, J.
TYPE	
ORGANIZATION	
TITLE	RISKS FROM RADIOACTIVE WASTE DISPOSAL.
PUBLISH	Chem. Eng. London. July 1987. P.55
DATE	87/07/00
ABSTRACT	This article discusses the hazards associated with the disposal of high, medium, and low level radioactive wastes and

KEYWORDS	acceptability to the public. Hazards from normal ope
LOCATION	the disposal site and arising from a major accident
REFERENCE	assessed using mathematical models.
	RISK ANALYSIS: modelling, disposal and storage alter
AUTHOR	Truax, Hawley
TYPE	assoc
ORGANIZATION	Environmental Action.
TITLE	SURVIVING THE 1980'S AT EPA.
PUBLISH	Environmental Action, January/February 1989, 5pp.
DATE	89/02/00
ABSTRACT	Discusses the approach to risk assessment now gainin in the U.S. especially as practiced by the Environme Protection Agency. There are concerns related to it on scientific data which may not always be adequate; to which it depends on experts and those with resour inherently excluding citizens; and that it can be us political tool by regulatory agencies.
KEYWORDS	RISK ANALYSIS:
LOCATION	1525 New Hampshire Ave.NW, Washington, D.C, 20036
REFERENCE	anne
AUTHOR	Johnston, P.D. (Department of the Environment, Londo Radioactive Waste Div.) (and others).
TYPE	govt
ORGANIZATION	Nuclear Energy Agency. 75- Paris, (France).
TITLE	THE AIMS AND USES OF UNCERTAINTY ANALYSIS IN THE CON DEVELOPMENT AND REGULATION OF UNDERGROUND DISPOSAL O RADIOACTIVE WASTE.
PUBLISH	P. 44-52. Uncertainty analysis for performance asses radioactive waste disposal systems. Proceedings of a workshop. Paris, France. Organization for Economic C and Development, 1987. 258 p.
DATE	87/00/00
ABSTRACT	The development and regulatory contexts for uncertai are described in connection with underground disposa radioactive waste.
KEYWORDS	RISK ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Kasperson, Roger E. (Center for Technology, Environm Development, Clark University); Renn, Ortwin (Mounta Research, Inc.); Slovic, Paul (Decision Research, Eu Oregon)
TYPE	acad/priv
ORGANIZATION	Nuclear Waste Project Office, State of Nevada Agency Projects.
TITLE	THE SOCIAL AMPLIFICATION OF RISK: A CONCEPTUAL FRAME
PUBLISH	NWPO, Carson City, January, 1988, 28pp.
DATE	88/01/00
ABSTRACT	The dilemma for society is the need to use risk anal design public policies, and the inability of current concepts to explain and anticipate public reaction t technical analysis of risk and the cultural, social individual response structures shaping public experi must be integrated in order to fully plan institutio responses and protective actions.
KEYWORDS	RISK ANALYSIS: social impacts.

LOCATION
REFERENCE

Capitol Complex, Carson City, Nevada 89710
anne

AUTHOR
TYPE
ORGANIZATION
TITLE

govt

PUBLISH
DATE

TOWARD A RISK ASSESSMENT OF THE SPENT FUEL AND HIGH-
WASTE DISPOSAL SYSTEM.

DOE Report BNL-51972, April 1986. 120 p.
86/04/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

RISK ANALYSIS: disposal and storage alternatives.

AUTHOR
TYPE
ORGANIZATION
TITLE

Nuclear Energy Agency. 75-Paris, (France).
UNCERTAINTY ANALYSIS FOR PERFORMANCE ASSESSMENTS OF
WASTE DISPOSAL SYSTEMS. PROCEEDINGS OF AN NEA WORKSH
Paris (France). Organization for Economic Co-operati
Development. 1987. 258 p.

PUBLISH

87/00/00

DATE
ABSTRACT

The prediction of the long-term performance of radio
disposal systems may be improved using uncertainty a
techniques.

KEYWORDS
LOCATION
REFERENCE

RISK ANALYSIS: geologic disposal.

AUTHOR

Marivoet, J. (entre D'etude de L'energie Nucleaire,
Belgium); Saltelli, A. (Commission of the European C
Ispra, Italy. Joint Nuclear Research Center); Cadeel
(Commission of the European Communities, Brussels,
Belgium. Directorate General for Research, Science an
Development).

TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Commission of the European Communities, Luxembourg.
UNCERTAINTY ANALYSIS TECHNIQUES.

1987. 20 p.

87/00/00

The origin of the uncertainty affecting performance
as well as their propagation to dose and risk result
discussed.

KEYWORDS
LOCATION
REFERENCE

RISK ANALYSIS:

AUTHOR

Jardine, L.J. (Betchel National, Inc., San Francisco
Post, R.G. (ed.)

TYPE
ORGANIZATION
TITLE

govt

PUBLISH

UTILIZATION OF PROBABALISTIC RISK ASSESSMENTS TO GUI
DESIGNS OF A REPOSITORY.

P. 27-32. Waste Management '87: Waste Isolation in t

AUTHOR	govt
TYPE	Atomic Energy of Canada, Ltd.
ORGANIZATION	"NUCLEAR WASTE DISPOSAL PREDICTED TO BE SAFE" SAYS A
TITLE	AECL, Pinawa, Manitoba, October, 1985, 3pp.
PUBLISH	85/10/01
DATE	AECL news release on the Second Interim Concept Asse
ABSTRACT	Document expressing confidence that the underground method will be safe. Claims there will be no risk f pre- or post-closure phases, transportation will be will be socio-economic benefits.
KEYWORDS	SAFETY ANALYSIS: geologic disposal, economics.
LOCATION	WNRE, Pinawa, Manitoba ROE 1LO
REFERENCE	anne
AUTHOR	Harris, P.A., et al.
TYPE	acad
ORGANIZATION	A METHODOLOGY FOR HIGH-LEVEL WASTE SYSTEMS SAFETY AN
TITLE	PRECLOSURE PHASE. WASTE MANAGEMENT '85.
PUBLISH	1985. P. 409-412.
DATE	85/00/00
ABSTRACT	
KEYWORDS	SAFETY ANALYSIS: waste management.
LOCATION	
REFERENCE	
AUTHOR	Glasbergen, P. (RIVM/LBG, Bithoven, Netherlands); Ja (ECN, Petten, Netherlands); Hamstra, J. (Avora, Berg Netherlands).
TYPE	
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	A NETHERLANDS APPROACH FOR ASSESSING THE PERFORMANCE LONG-TERM SAFETY ASPECTS OF A HIGH-LEVEL WASTE REPOS MINED IN A MEDIUM SIZED SALT DOME.
PUBLISH	1987. 93 p.
DATE	87/00/00
ABSTRACT	This report describes the performance assessment wor being carried out under contract to the European Com order to evaluate the isolation capability of a salt is to be used for the disposal of high-level waste.
KEYWORDS	SAFETY ANALYSIS: salt.
LOCATION	
REFERENCE	
AUTHOR	Saunders, P.A.H. (UKAEA Harwell Lab. Environmental a Science Div.).
TYPE	
ORGANIZATION	United Kingdom Nirex, Ltd.
TITLE	AN OUTLINE OF NIREX'S RESEARCH AND SAFETY ASSESSMENT
PUBLISH	November 1987. 21 p.
DATE	87/11/00
ABSTRACT	This document outlines the safety studies being carr Nirex to ensure that radioactive wastes are disposed a way that significant exposure of the public to rad a minimum.

KEYWORDS	SAFETY ANALYSIS: public exposure.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	ASSESSING THE RADIOLOGICAL SAFETY OF WASTE REPOSITOR
PUBLISH	April 1986. V. 28(1) p. 25.
DATE	86/04/00
ABSTRACT	
KEYWORDS	SAFETY ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Brunner, . (Nuklear-Chemie und Metallurgie G.M.B.H.,
TYPE	Germany, F.R.).
ORGANIZATION	Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kernt
TITLE	Gesellschaft E.V., Bonn, Germany, (F.R.).
PUBLISH	BITUMINATION OF RADIOACTIVE WASTES UNDER THE ASPECT
DATE	(REPORT ON A SYSTEMS STUDY 'BITUMINATED RADIOACTIVE
ABSTRACT	P. 453-456. Annual Meeting on Nuclear Technology '87
KEYWORDS	Proceedings. Session 4: Fuel Cycle and Waste Process
LOCATION	829 p.
REFERENCE	87/00/00
	SAFETY ANALYSIS:
AUTHOR	Kimura, R.T.; Lindsey, D.W.
TYPE	
ORGANIZATION	
TITLE	CHARACTERIZATION OF AIRBORNE RADIONUCLIDE PARTICULAT
PUBLISH	VENTILATED LIQUID-WASTE TANKS.
DATE	Trans. Am. Nucl. Soc. 1987. V.54. P.65-66.
ABSTRACT	87/00/00
	Tank vapor spaces in selected underground double-wal
	the US Dept. of Energy Hanford site have been presen
	form of particulates or aerosols. Such information i
	in the development of credible accident scenarios fo
	analyses.
KEYWORDS	SAFETY ANALYSIS: containment.
LOCATION	
REFERENCE	
AUTHOR	Jardine, L.J.
TYPE	
ORGANIZATION	
TITLE	DESIGNER'S INTERPRETATION OF THE 10CFR60.2 TERM IMPO
PUBLISH	SAFETY.
DATE	Trans. Am. Nuc. Soc. 1987. V.54 P. 105-106.
ABSTRACT	87/00/00
	Numerical quantification of the phrase important to
	be developed for all nuclear facilities to normalize
	designers' approaches to specifying requirements rel
	safety.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	

AUTHOR	Hadermann, J. (Switzerland).
TYPE	
ORGANIZATION	NAINE.
TITLE	EIR'S CONTRIBUTION TO NUCLEAR WASTE MANAGEMENT IN SW (IN GERMAN).
PUBLISH	NAGRA INF. (Jun 1987). V. 9(1-2) p. 42-46.
DATE	87/01/00
ABSTRACT	Most of the activities of the Federal Institute for Research in the area of nuclear waste management are optimisation of waste conditioning, aimed at assessing long-term safety of radioactive waste repositories.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	

AUTHOR	Petterson, John S. (Impact Assessment, Inc. La Jolla
TYPE	priv
ORGANIZATION	Nuclear Waste Projects Office, State of Nevada Agency Projects. (USA).
TITLE	GOIANIA INCIDENT CASE STUDY.
PUBLISH	NWPO-SE-015-88, June 1988, 42pp.
DATE	88/06/00
ABSTRACT	The physical, economic, social and political impacts of a nuclear accident in Goiania, Brazil are examined. The impacts (especially perceived risk) were most significant. Explores the processes by which these impacts came about and their mitigation by the Brazilian government. Notes analogies to a potential accident at a high-level waste site in the U.S.
KEYWORDS	SAFETY ANALYSIS: socio-economic and ecological impacts
LOCATION	Captiol Complex, Carson City, Nevada 89710
REFERENCE	anne

AUTHOR	Ligon, D.M.; Stamatelatos, M.G.; Barsell, A.W.; Boli
TYPE	priv/govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).; GA Technologies, (USA).; Nuclear Regulatory Commission, Washington DC
TITLE	HIGH-LEVEL WASTE PRECLOSURE SYSTEMS SAFETY ANALYSIS:

PUBLISH	FINAL REPORT.
DATE	June 1987. 163 p.
ABSTRACT	87/06/00 The original work scope for Phase II was not completed. The objective was to demonstrate the methodology, developed in Phase I by quantifying a sample problem consisting of a small number of accident scenarios identified in the first study.
KEYWORDS	SAFETY ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	

AUTHOR	Laub, T.W.; Jardine, L.J. (Sandia National Labs., Di
TYPE	Nuclear waste Engineering projects, Albuquerque, NM)
ORGANIZATION	govt
TITLE	INITIAL Q-LIST FOR THE PROSPECTIVE YUCCA MOUNTAIN REPOSITORY BASED ON ITEMS IMPORTANT TO SAFETY AND WASTE ISOLATION
PUBLISH	P.293-300. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ
DATE	of Arizona Nuclear Engineering Department. 1987.
ABSTRACT	87/00/00 A method for identifying items important to safety b

KEYWORDS	probabalistic risk assessment approach was developed
LOCATION	implemented for the conceptual design of the Yucca M
REFERENCE	repository.
	SAFETY ANALYSIS:
AUTHOR	Smith, R.M.; Jung, D.W.; Baumgartner, P.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	INTERNATIONAL SAFEGUARDS AT A POTENTIAL CANADIAN NUC
	WASTE DISPOSAL CENTRE FOR FUEL RECYCLE WASTE AND/OR
PUBLISH	
DATE	88/00/00
ABSTRACT	
KEYWORDS	SAFETY ANALYSIS: reprocessing.
LOCATION	
REFERENCE	
AUTHOR	Kennedy, W.E.Jr.; Peloquin, R.A.; Napier, B.A.; Neud
TYPE	priv/govt
ORGANIZATION	Pacific Northwest Lab. WA; Nuclear Regulatory Commis
	Washington, DC. Div. of Waste Management.
TITLE	INTRUDER DOSE PATHWAY ANALYSIS FOR THE ONSITE DISPOS
	RADIOACTIVE WASTES: THE ONSITE/MAXII COMPUTER PROGRA
PUBLISH	February 1987. 449 p.
DATE	87/02/00
ABSTRACT	This document summarizes initial efforts to develop
	human-intrusion scenarios and a modified version of
	computer program for potential use by the NRC in rev
KEYWORDS	applications for onsite radioactive waste disposal.
LOCATION	SAFETY ANALYSIS:
REFERENCE	
AUTHOR	Biesold, H.; Haider, G.
TYPE	
ORGANIZATION	Bundesministerium fuer Umwelt-, Naturschultz und
	Reaktorsicherheit, Bonn, Germany, F.R.; Gesellschaft
	Reaktorsicherheit M.B.H., Koeln, Germany, (F.R.).
TITLE	INVESTIGATIONS ON THE COMPARISON OF TOXICITY OF RADI
	WASTES WITH ELEMENTS IN A MINE DEPOSIT AND IN FILTER
	German)
PUBLISH	1987. 27 p. Schriftenreihe Reaktorsicherheit und Str
	-Ergebnisberichte, Untersuchungen, Studien, Gutachte
DATE	87/00/00
ABSTRACT	For an estimate of the potential danger of a final s
	radioactive waste, comparisons with a mineral formin
	containing heavy metals and with filter dust from co
	power stations were made based on hazard measurement
	radioactive and chemically toxic materials.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Storck, R.
TYPE	
ORGANIZATION	KERTA.
TITLE	LONG-TERM SAFETY ANALYSES FOR FINAL DISPOSAL. (IN GE
PUBLISH	Kerntechnik. (Mar-Apr 1987). V. 50 (1) P. 50-52.
DATE	87/03/00

ABSTRACT	The experience gained from safety analyses concerning disposal sites in the Federal Republic of Germany is Relevant radionuclides and significant characteristics migration of radionuclides are dealt with.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Torgerson, D.F.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	NEA/CSNI WORK ON THE TECHNICAL STATUS OF THE SOURCE
PUBLISH	P. 35-37, Proceedings of an International Symposium Term Evaluation for Accident Conditions held in Colu
	28 October - 1 November 1985. 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	SAFETY ANALYSIS: international.
LOCATION	
REFERENCE	
AUTHOR	Tasker, A.
TYPE	priv
ORGANIZATION	
TITLE	NIREX SAFETY RESEARCH.
PUBLISH	Atom. (UK). Feb. 1989. p. 36-37.
DATE	89/02/00
ABSTRACT	The paper concerns the research program of UK Nirex radioactive waste disposal at a meeting at Didcot po November, 1988. The aim of the program was to study aspects of radioactive waste after it had been place underground repository. The research projects within are briefly outlined.
KEYWORDS	SAFETY ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Lowther, William.
TYPE	media
ORGANIZATION	
TITLE	NUCLEAR NEGLIGENCE: DEADLY RADIOACTIVE LEAKS ARE WID
PUBLISH	Maclean's (November 7 1988) 101(46):54-55
DATE	88/11/07
ABSTRACT	
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Jardine, L.J.; Ma, C.W.; Sit, R.C.; Donahue, R.J.
TYPE	priv
ORGANIZATION	Bechtel National Inc. CA (USA).
TITLE	PRELIMINARY PRECLOSURE SAFETY ANALYSIS FOR A PROSPEC
PUBLISH	MOUNTAIN REPOSITORY. Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un
	Arizona Nuclear Engineering Dept. 1987. p. 645-650.
DATE	87/00/00
ABSTRACT	A quantitative probabilistic safety assessment was p the reference conceptual repository design being use Mountain. A new methodology to quantify radioactive for the air pathways was also developed and applied

KEYWORDS	assessment.
LOCATION	SAFETY ANALYSIS: monitoring.
REFERENCE	
AUTHOR	Robinson, P.C.
TYPE	assoc
ORGANIZATION	UKAEA Atomic Energy Research Establishment, Harwell.
TITLE	Physics Div.
PUBLISH	PROBABILISTIC SAFETY ASSESSMENT IN RADIOACTIVE WASTE
DATE	July 1987. 57 p.
	87/07/00
ABSTRACT	Probabilistic safety assessment codes are now widely radioactive waste disposal assessments. This report overview of the current state of the field. The relationship between the codes and the regulations covering radioactive waste disposal is discussed and the characteristics of current codes is described.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Russell, V.
TYPE	
ORGANIZATION	
TITLE	PROTECTING PERSONNEL AND THE ENVIRONMENT FROM RADIOACTIVE EMISSIONS BY CONTROLLING SUCH EMISSIONS AND SAFELY DISPOSING OF THEIR ENERGY.
PUBLISH	5 May 1987. Vp.
DATE	87/05/05
ABSTRACT	An apparatus is described for protecting organisms and the environment from harmful emissions from a source of radioactive waste by shielding the organisms and the environment from at least a portion of such emissions, while drawing power of such emissions as electricity.
KEYWORDS	SAFETY ANALYSIS: health.
LOCATION	
REFERENCE	
AUTHOR	Brennecke, P.; Warnecke, E.
TYPE	govt
ORGANIZATION	Physikalisch-Technische Bundesanstalt, (FRG).
TITLE	REQUIREMENTS FOR RADIOACTIVE WASTE FOR FINAL STORAGE
PUBLISH	FINAL STORAGE CONDITIONS, AS OF NOVEMBER 1986) - KONRAD
DATE	Jan. 1987. 45 p.
ABSTRACT	87/01/00 In order to prove the safety of the planned Konrad facility during the operating and post-operational phase, safety measures were carried out. The results are given in this paper.
KEYWORDS	SAFETY ANALYSIS: geologic disposal.
LOCATION	
REFERENCE	
AUTHOR	Bogorinski, P.; Baltes, B.; Martens, K.H.
TYPE	govt
ORGANIZATION	Gesellschaft für Reaktorsicherheit (FRG).
TITLE	REVIEW OF COMPUTER MODELS USED FOR POST CLOSURE SAFETY OF NUCLEAR WASTE REPOSITORIES IN THE FRG.
PUBLISH	Waste Management '87: Waste Isolation in the US, Technical Programs and Public Education. Tucson, AZ, (USA). University of Arizona Nuclear Engineering Dept. 1987. p. 651-656.

DATE
ABSTRACT

87/00/00
For long term safety in geologic disposal groundwater provides a release scenario for the radionuclides to

KEYWORDS
LOCATION
REFERENCE

biosphere. A review of a methodology that simulates radionuclides in the geosphere is presented.
SAFETY ANALYSIS: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Hancox, W.T.
govt
Atomic Energy of Canada Limited.
SAFE, PERMANENT DISPOSAL OF NUCLEAR FUEL WASTE.
12 p. (1987). Reprinted from Nuclear Journal of Canada 1(2):256-267.
87/00/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

SAFETY ANALYSIS:

AUTHOR
TYPE
ORGANIZATION
TITLE

Byers, K.R.
govt
SAFEGUARDS AND SECURITY DESIGN GUIDELINES FOR CONCEPT MONITORED RETREIVABLE STORAGE (MRS) FACILITIES.
J. Inst. Nuclear Materials Management. V. 13. p. 257

PUBLISH
DATE
ABSTRACT

Existing safeguards and security regulations that may be applicable to a monitored retrievable storage (MRS) are not well defined. MRS facility design features and other considerations are proposed that would enhance facility protection and provide additional assurance that proposed systems and procedures would be effectively implemented.
SAFETY ANALYSIS: retrieval.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Richter, B.; Stien, G.; Weh, R.
Deutsches Atomforum E.V., Bonn, Germany, F.R.; Kerntechnische Gesellschaft E.V., Bonn, Germany, (F.R.).
SAFEGUARDS ASPECTS OF INTERIM AND FINAL STORAGE OF SPENT FUEL ELEMENTS. (in German)
P.425-428. Annual Meeting on Nuclear Technology '87. Session 4: Fuel Cycle and Waste Processing. 1987. 82
87/00/00

DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

SAFETY ANALYSIS:

AUTHOR
TYPE

Berg, H.P.; Ehrlich, D.; Illi, H.; Thomauske, B.R.
(Physikalisch-Technische Bundesanstalt, Braunschweig)

ORGANIZATION	SAFETY ANALYSES AND DERIVATION OF SITE SPECIFIC REQUIREMENTS FOR THE PLANNED GERMAN REPOSITORY Nucl. Technol. October 1987. V. 79(1) P.92-99. 87/10/00 A brief summary of the safety analyses procedure for operational and post-operational phase of the planned "Konrad" repository is given. SAFETY ANALYSIS:
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	Baltes, B.; Holhauer, U.; Bloser, M.H. govt Gesellschaft für Reaktorsicherheit (FRG). SAFETY ANALYSES FOR THE POST OPERATIONAL PHASE OF FI REPOSITORIES OF RADIOACTIVE WASTE. Waste Management '87: Waste Isolation in the US, Technical Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 657-660. 87/00/00 For storing radioactive waste in a salt mine, the long-term safety of the repository has to be demonstrated. By safety analyses it has to be proved that in case of this type the radioactive load on the biosphere remains within the fluctuation range of natural radioactivity. The codes for the analysis of the nuclide migration in the covering rock are discussed. SAFETY ANALYSIS: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	Prijs, J. (Netherlands Energy Research Foundation, Petten) govt SAFETY ASPECTS CONCERNING THE STORAGE OF RADIOACTIVE ROCK-SALT: A SYSTEM-ANALYTICAL APPROACH. (in Dutch) Energiespectrum. January 1987. V. 11(1) P.24-30. 87/01/00 In this paper a number of characteristic aspects are a safety study for geologic waste-storages, like isolation duration, the multibarrier system, the scenarios and analyzing techniques. SAFETY ANALYSIS: salt.
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	Saltelli, A. (Commission of the European Communities Italy. Joint Research Centre); Marivoet, J. (Nuclear Establishment, Nuclear Chemistry Dept., Mol, Belgium)
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	SAFETY ASSESSMENT FOR NUCLEAR WASTE DISPOSAL. SOME ABOUT ACTUAL RISK CALCULATIONS. Radioact. Waste Manage. Nucl. Fuel Cycle. March 1988 P.309-321. 88/03/00
TITLE	
PUBLISH	
DATE	
ABSTRACT	

ABSTRACT	Two practical aspects of risk computations in safety for nuclear waste disposal are discussed.
KEYWORDS	SAFETY ANALYSIS: risk analysis.
LOCATION	
REFERENCE	
AUTHOR	Ammon, R.V.
TYPE	priv
ORGANIZATION	
TITLE	SAFETY OF NUCLEAR WASTE MANAGEMENT. (in German)
PUBLISH	Nachr. Chem., Tech. Lab. September 1987. V. 35(9) P.
DATE	87/09/00
ABSTRACT	The main topics of this seminar are safety aspects o handling, incidents in reprocessing facilities, and processing and ultimate storage of radioactive waste
KEYWORDS	SAFETY ANALYSIS: reprocessing, disposal and storage
LOCATION	
REFERENCE	
AUTHOR	Wurtinger, W.; Gruendler, D. (Gesellschaft fuer Reak M.B.H., Germany, F.R.)
TYPE	Post, R.G. (ed.)
ORGANIZATION	
TITLE	SAFETY REQUIREMENTS FOR WASTE PACKAGES, THE BASIS FO CRITERIA OF THE KONRAD REPOSITORY.
PUBLISH	P. 581-586. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Safety related requirements for the acceptance of wa due for final disposal in the repository planned for Republic of Germany in the Konrad iron ore mine were from site-specific safety analyses.
KEYWORDS	SAFETY ANALYSIS: containment.
LOCATION	
REFERENCE	
AUTHOR	Lindstroem Jensen, K.E. (Elsam Power Station Enginee Fredericia, Denmark).
TYPE	
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	SAFETY STUDIES OF HLW-DISPOSAL IN THE MORS SALT DOME THE SALT OPTION OF THE PAGIS PROJECT.
PUBLISH	1987. 88 p.
DATE	87/00/00
ABSTRACT	The study, which is a support to the Pagis project,
KEYWORDS	tasks concerning the evaluation of the Danish salt d evaluation of the human intrusion scenario where a c excavated near the HLW-repository by solution mining
LOCATION	SAFETY ANALYSIS: leaching, salt.
REFERENCE	
AUTHOR	Newsom, P.C.; Roberts, C.J.; Yucien Y.; Marchetti, S
TYPE	priv
ORGANIZATION	West Valley Nuclear Services Co., Inc. NY (USA).
TITLE	TECHNICAL AND ADMINISTRATIVE APPROACH FOR THE WEST V DEMONSTRATION PROJECT SAFETY PROGRAM.
PUBLISH	June 1987. 54 p.
DATE	87/06/00

ABSTRACT	In order to assure the safety of the public and the the WVPD, a system of hazard identification, categor analysis and review has been established.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad/media
ORGANIZATION	
TITLE	THE GERMAN PROJECT: SAFETY STUDIES FOR NUCLEAR WASTE MANAGEMENT-DEVELOPMENT OF A SAFETY ASSESSMENT METHOD FINAL DISPOSAL OF NUCLEAR WASTE IN A SALT DOME.
PUBLISH	April 1986. Radioactive Waste Management & the Nucle Cycle. V 7(2) p. 209.
DATE	86/04/00
ABSTRACT	
KEYWORDS	SAFETY ANALYSIS: geologic disposal, salt.
LOCATION	
REFERENCE	
AUTHOR	Berg, H. P.
TYPE	
ORGANIZATION	
TITLE	THE KONRAD REPOSITORY - RESULTS OF THE SAFETY ANALYS DERIVATION OF REQUIREMENTS ON RADIOACTIVE WASTES. (I Kerntechnik. (Mar-Apr 1987). V. 50 (1) P. 22-28.
PUBLISH	87/03/00
DATE	
ABSTRACT	For the planned Konrad repository a site-specific sa has been carried out including the geological situat technical concept of the disposal mine and the radio wastes to be disposed of.
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Huerzler, P. (AARE-Tessin A.G. Fuer Elektrizitaet, Switzerland).
TYPE	
ORGANIZATION	
TITLE	THE PROS AND CONS OF SAFETY. (OF NUCLEAR ENERGY) (in Electro-Rev. 17 Febuary 1988. V. 80(4). P.29-30.
PUBLISH	88/02/17
DATE	
ABSTRACT	The author discusses three cases in relation to conf nuclear energy: the fire at Windscale, the leaks in reprocessing plant; and the Transnuklear/Nukem scand
KEYWORDS	SAFETY ANALYSIS:
LOCATION	
REFERENCE	
AUTHOR	Papp, T. (Swedish Nuclear Fuel and Waste Management Stockholm); Come, B. (CEC); Chapman, NA. (BGS).
TYPE	priv
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	THE ROLE OF NATURAL ANALOGUES IN SAFETY ASSESSMENT A ACCEPTABILITY.
PUBLISH	P. 12-22. Natural Analogues in Radioactive Waste Dis Proceedings of a symposium organized by the CEC and Brussels. Graham & Trotman, 1987. 506 p. Radioactive Management Series.
DATE	87/04/00

ABSTRACT	The safety assessment must evaluate the level of safety repository, the confidence that can be placed on the and how well the repository can meet the acceptance the society.
KEYWORDS	SAFETY ANALYSIS: natural analogues.
LOCATION	
REFERENCE	
AUTHOR	Carlson, R.L.; Hairston, W.P.; O'Callaghan, P.B.; Gr A.J.; Ruemmler, W.P. (Westinghouse Hanford Co., Rich priv
TYPE	
ORGANIZATION	
TITLE	THE SAFEGUARDS ACTIVE RESPONSE INVENTORY SYSTEM (SAR
PUBLISH	Nucl. Mater. Manage. July 1987. V.16 P.339-344.
DATE	87/07/00
ABSTRACT	The safeguards active response inventory system is a accountability system developed for nuclear material that incorporates elements of process monitoring, cr safety, physical inventory and safeguards.
KEYWORDS	SAFETY ANALYSIS: monitoring.
LOCATION	
REFERENCE	
AUTHOR	Lutze, W.; Grambow, B. (Hahn-Meitner-Institut fuer K Berlin G.M.B.H., Germany, F.R.); Ewing, R.C.; Jercin (New Mexico Univ., Albuquerque, USA).
TYPE	Come, B. (CEC); Chapman, N.A. (BGS)
ORGANIZATION	acad Commission of the European Communities, Luxembourg.
TITLE	THE USE OF NATURAL ANALOGUES IN THE LONG-TERM EXTRAP GLASS CORROSION PROCESSES.
PUBLISH	P. 142-152. Natural Analogues in Radioactive Waste D Proceedings of a symposium organized by the CEC and Brussels. Graham & Trotman, 1987. 506 p. Radioactive Management Series.
DATE	87/04/00
ABSTRACT	One of the most critical aspects of nuclear waste ma the extrapolation of materials and systems behavior short-term experiments, typically on the order of on comparatively very long periods of time. Safety and analyses have to rely on extrapolations and the resp findings have to be evaluated in the frame of licens procedures.
KEYWORDS	SAFETY ANALYSIS: corrosion, risk analysis, natural a
LOCATION	
REFERENCE	
AUTHOR	Merz, E.R. (Inst. of Chemical Tech., Julich, Germany
TYPE	acad
ORGANIZATION	
TITLE	TIME PERIOD OF CONCERN FOR JUDGING THE LONG-TERM HAZ GEOLOGICAL DISPOSAL OF RADIOACTIVE WASTE.
PUBLISH	P. 181-186. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	Although time perspective between 10/sup 3/ and 10/s are under discussion for performing repository safet assessments, the persuasion is growing that a time f about 10,000 years should be appropriate.
KEYWORDS	SAFETY ANALYSIS:

AUTHOR	Devlin, T.K.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	1986 ENVIRONMENTAL MONITORING REPORT.
PUBLISH	April 1987. 23 p.
DATE	87/04/00
ABSTRACT	SNLL conducts various research activities which have potential for release of hazardous materials or radi the environment. Potential emissions include tritium uranium, metals, solvents, and common laboratory che
KEYWORDS	MONITORING:
LOCATION	
REFERENCE	

AUTHOR	Hoff, D.L.; Chew, E.W.; Rope, S.K.
TYPE	govt
ORGANIZATION	USDOE Idaho Operations Office. Idaho Falls (USA).
TITLE	1986 ENVIRONMENTAL MONITORING PROGRAM REPORT FOR THE NATIONAL ENGINEERING LABORATORY SITE.
PUBLISH	May 1987. 74 p.
DATE	87/05/00
ABSTRACT	This report presents onsite and offsite data collect for the routine environmental monitoring program con the Radiological and Environmental Sciences Laborato the Department of Energy (DOE) at the Idaho National Laboratory (INEL) site. The purpose of this routine to monitor radioactive and nonradioactive materials from INEL site operations which may reach the surrou offsite environment and population.
KEYWORDS	MONITORING: health.
LOCATION	
REFERENCE	

AUTHOR	Millard, G.; Pei, P.; Felicetti, S.; Gray, C.; Thomp Phelan, J.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	1986 ENVIRONMENTAL MONITORING REPORT, SANDIA NATIONA LABORATORIES, ALBUQUERQUE, NEW MEXICO.
PUBLISH	April 1987. 109 p.
DATE	87/04/00
ABSTRACT	Because radionuclides potentially are released in sm quantities from it's research activities, SNLA has a environmental monitoring program which analyzes from tritium, uranium, alpha emitters, and beta emitters soil, air, and vegetation.
KEYWORDS	MONITORING:
LOCATION	
REFERENCE	

AUTHOR	McIntyre, P.F.; Hawkins, R.H.
TYPE	govt

ORGANIZATION	Savannah River Lab. SC (USA)
TITLE	1987 MONITORING REPORT OF SPECIAL WASTEFORM LYSIMETE SITE.
PUBLISH	September 17, 1987. 42 p.

DATE	87/09/17
ABSTRACT	Analyses for radionuclides in the leachate from ten wasteform lysimeters at the Savannah River Plant have since Jan. 1983.
KEYWORDS	MONITORING: chemistry, radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Jaquish, R.E.; Napier, B.A.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	A COMPARISON OF ENVIRONMENTAL RADIONUCLIDE CONCENTRATIONS CALCULATED BY A MATHEMATICAL MODEL WITH MEASURED CONCENTRATIONS
PUBLISH	September 1987. 7 p.
DATE	87/09/00
ABSTRACT	The Pacific Northwest Lab conducts an extensive environmental monitoring program at the Hanford site to determine radioactivity in the environment attributable to Hanford operations and to determine the resulting dose to the population.
KEYWORDS	MONITORING: modelling, public exposure.
LOCATION	
REFERENCE	
AUTHOR	Rodgers, John C.; Kenney, Jim W.
TYPE	govt
ORGANIZATION	Environmental Evaluation Group, Health and Environment Department, State of New Mexico. (USA).
TITLE	A CRITICAL ASSESSMENT OF CONTINUOUS AIR MONITORING SYSTEMS AT WASTE ISOLATION PILOT PLANT.
PUBLISH	EEG-38, Santa Fe, March, 1988, 57pp.
DATE	88/11/00
ABSTRACT	An evaluation of the air monitoring systems at WIPP shows a failure to meet minimum performance requirements. In addition there are difficulties with the continuous Air Monitoring instrumentation which may require replacement before the system becomes operational.
KEYWORDS	MONITORING:
LOCATION	7007 Wyoming Blvd.NE, Ste.F-2, Albuquerque, New Mexico
REFERENCE	NFW 2.2-53-2
AUTHOR	McKinley, I.G.; West, J.M.; Grogan, H.A.
TYPE	govt
ORGANIZATION	Eidgenossisches Inst. (Switzerland).
TITLE	AN ANALYTICAL OVERVIEW OF THE CONSEQUENCES OF MICROBIAL ACTIVITY IN A SWISS HLW REPOSITORY.
PUBLISH	Fuer Reaktorforschung, 1985. 107 p.
DATE	85/00/00
ABSTRACT	
KEYWORDS	MONITORING: analytical techniques.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	
ORGANIZATION	Stanford Linear Accelerator Center, Menlo Park, CA (USA)
TITLE	ANNUAL ENVIRONMENTAL MONITORING REPORT, JANUARY- DECEMBER
PUBLISH	March 1987. 40 p.
DATE	87/03/00
ABSTRACT	Environmental monitoring and remedial actions at the Stanford linear accelerator center are reported. The local climate

KEYWORDS	geology, site water usage, land use and demography a reviewed.
LOCATION	MONITORING:
REFERENCE	
AUTHOR	
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	ENVIRONMENTAL MONITORING AT HANFORD FOR 1986.
PUBLISH	May 1987. 225 p.
DATE	87/05/00
ABSTRACT	Environmental monitoring at the Hanford site is cond Battelle Memorial Institute, Pacific Northwest Lab f DOE. The data collected provide a historical record levels of radionuclides and radiation attributable t causes, world wide fallout, and Hanford operations.
KEYWORDS	MONITORING:
LOCATION	
REFERENCE	
AUTHOR	Holland, R.C.; Buddemeier, R.W.; Brekke, D.D.
TYPE	govt
ORGANIZATION	Lawrence Livermore National Lab. CA (USA).
TITLE	ENVIRONMENTAL MONITORING AT THE LAWRENCE LIVERMORE N LABORATORY: 1986 ANNUAL REPORT.
PUBLISH	April 1987. 120 p.
DATE	87/04/00
ABSTRACT	This report documents the results of the environment program at the Lawrence Livermore National Lab for 1 evaluate the effect of LLNL operations on the local measurements of direct radiation and a variety of ra and chemical pollutants in ambient air, soil, surfac groundwater, vegetation, milk, foodstuff, and sewage were made at both the Livermore site and nearby site
KEYWORDS	MONITORING: ecological impacts.
LOCATION	
REFERENCE	
AUTHOR	Bisping, L.E.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	ENVIRONMENTAL MONITORING MASTER SAMPLING SCHEDULE: J DECEMBER 1989.
PUBLISH	Jan. 1989. 49 p.
DATE	89/01/00
ABSTRACT	Environmental monitoring of the Hanford Site is cond Pacific Northwest Lab. for the US DOE. This document the planned schedule for routine sample collection f year 1989 for the Surface and Groundwater Environmen Monitoring Projects.
KEYWORDS	MONITORING:
LOCATION	
REFERENCE	
AUTHOR	Laseter, W.A.
TYPE	priv
ORGANIZATION	Mason and Hanger-Silas Mason Co., Inc., Amarillo, TX
TITLE	ENVIRONMENTAL MONITORING REPORT FOR PANTEX PLANT COV
PUBLISH	April 1987. 97 p.
DATE	87/04/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

This report presents monitoring data for both radioactive and non-radioactive species in the local environment.
MONITORING:

AUTHOR
TYPE
ORGANIZATION
TITLE

Reyes, B.D.; Tkachyk, J.W.; Ritter, P.D.; Wilhelmssen
priv
EG and G Idaho Inc., (USA).
ENVIRONMENTAL SURVEILLANCE FOR THE EG AND G IDAHO RADIOACTIVE WASTE MANAGEMENT AREAS AT THE IDAHO NATIONAL ENGINEERING LABORATORY.

PUBLISH
DATE
ABSTRACT

Aug. 1987. 90 p.
87/08/00
The 1986 environmental surveillance report for the radioactive waste management areas at the Idaho National Engineering Laboratory describes environmental monitoring activities at the waste management complex, the experimental reduction of the radioactive mixed waste storage facility, the pre-commercial experimental pilot plant, and two surplus facilities.
MONITORING:

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Hedahl, T.G.; Reyes, B.D.
govt
Idaho National Engineering Lab. ID (USA).
ENVIRONMENTAL SURVEILLANCE OF EG AND G IDAHO RADIOACTIVE WASTE MANAGEMENT FACILITIES AT THE IDAHO NATIONAL ENGINEERING LABORATORY.
Waste Management '87: Waste Isolation in the US, Technical

PUBLISH

DATE
ABSTRACT

Programs and Public Education. Tucson, AZ, (USA). University of Arizona Nuclear Engineering Dept. 1987. p. 365-372.
87/00/00

KEYWORDS
LOCATION
REFERENCE

The Eg and G Idaho, Inc., environmental surveillance program performs routine and special environmental monitoring at the radioactive waste management facilities at the Idaho National Engineering Laboratory. Past data results are also evaluated and discussed.
MONITORING: waste management.

AUTHOR
TYPE
ORGANIZATION
TITLE

Miller, R.L.; Wahlen, R.K.
priv
Westinghouse Hanford Co., Richland, WA (USA).
ESTIMATES OF SOLID WASTE BURIED IN 100 AREA BURIAL GROUND (contains glossary)

PUBLISH
DATE
ABSTRACT

October 1987. 79 p.
87/10/00
Previous estimates of radionuclide inventory and hazardous materials were based on extrapolations using limited burial records. The estimates in this report are based on a review of historical documents, on reconstruction of burial practices, and on the experiences of knowledgeable individuals involved in the disposal of wastes generated during reactor operations.
MONITORING: waste management.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE

Rodgers, John C.
govt

ORGANIZATION	Environmental Evaluation Group, Health and Environme
TITLE	Department, State of New Mexico. (USA). EXHAUST STACK MONITORING ISSUES AT THE WASTE ISOLATI
PUBLISH	PLANT.
DATE	EEG-37, Santa Fe, November, 1987, 101pp.
ABSTRACT	87/11/00 Examines issues related to exhaust stack monitoring radioactive particles at the WIPP site. The system proved complex and difficult to design and implement several recommendations for redesign and improvement
KEYWORDS	MONITORING: radionuclide migration.
LOCATION	7007 Wyoming Blvd, NE, Ste.F-2, Albuquerque, New Mex
REFERENCE	NFW 2.2-53-1
AUTHOR	
TYPE	priv
ORGANIZATION	Bechtel National, Inc., Oak Ridge, TN (USA).
TITLE	FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM: WAY STORAGE SITE: ANNUAL SITE ENVIRONMENTAL REPORT, WAYN JERSEY, CALENDAR YEAR 1986.
PUBLISH	May 1987. 75 p.
DATE	87/05/00
ABSTRACT	During 1986, the Environmental Monitoring Program wa at the Wayne Interim Storage Site (WISS), a U.S. Dep Energy (DOE) facility located in the Township of Way Jersey. The WISS is part of the Formerly Utilized Si Action Program (FUSRAP), a DOE program to decontamin otherwise control sites where residual radioactive m remains from the early years of the nation's atomic program or from commercial operations causing condit Congress has mandated DOE to remedy.
KEYWORDS	MONITORING: mitigation.
LOCATION	
REFERENCE	NFW 2.2-53-5
AUTHOR	Kuhlmeier, P.D.; Motley, C.A.
TYPE	priv/govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).; Geraghty and Mill (USA).
TITLE	GROUNDWATER MONITOR WELL INSTALLATION AT TWELVE HAZA STORAGE OR HANDLING FACILITIES AT THE OAK RIDGE GASE DIFFUSION PLANT: PHASE 2, DETECTION MONITORING.
PUBLISH	June 1987. 140 p.
DATE	87/06/00
ABSTRACT	This report provides construction information for 41 monitor wells and a narrative describing a drilling, logging, and hydraulic permeability compounds that m entered the uppermost aquifer and any interconnecti
KEYWORDS	MONITORING: groundwater, design.
LOCATION	
REFERENCE	
AUTHOR	Mitchell, P.J.; Freshley, M.D.
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	GROUNDWATER MONITORING AND MODELLING AT THE HANFORD Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un
PUBLISH	Arizona Nuclear Engineering Dept. 1987. p. 351-356.
DATE	87/00/00
ABSTRACT	The groundwater monitoring program at the Hanford si

KEYWORDS	southeastern Washington state is continually evolving
LOCATION	response to changing operations at the site, changes
REFERENCE	groundwater flow system, movement of the constituent
	aquifers, and regulatory requirements.
	MONITORING: groundwater.
AUTHOR	
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	INTERCOMPARISON RUNS REFERENCE MATERIALS (AQCS).
PUBLISH	
DATE	1989. 70 p.
ABSTRACT	89/00/00
	The purpose of the Analytical Quality Control Service
	provided by the International Atomic Energy Agency is
	laboratories engaged in the analysis of nuclear, env
	biological, and materials of marine origin for radio
	major, minor and trace elements, as well as stable i
	using atomic and nuclear analytical techniques, to c
	quality of their work.
KEYWORDS	MONITORING: radionuclide migration.
LOCATION	
REFERENCE	NFW 2.2-53-4
AUTHOR	Williams, R.E.; Mc Grath, D.A.; Boland, J.R. (Reynol
TYPE	and Engineering Co., Inc., Las Vegas); Post, R.G. (e
ORGANIZATION	priv
TITLE	MONITORING OF HEAT AND MOISTURE MIGRATION FROM RADIO
	DISPOSED IN AN AUGERED SHAFT.
PUBLISH	p. 381-386. Waste Management '87: Waste Isolation in
	Technical Programs, and Public Education. Tucson, AZ
	Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	The temperature and moisture data will be used in co
	with data from gaseous tracer release tests in predi
	appraising the long-term performance of the GCDT.
KEYWORDS	MONITORING: tuff, thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Lemire, A.E.; Gascoyne, M. (Atomic Energy of Canada
	Manitoba)
TYPE	Graves, B. (ed.)
ORGANIZATION	govt
TITLE	NATURAL RADIOACTIVITY IN SOME GROUNDWATERS OF THE CA
	SHIELD.
PUBLISH	P. 97-110. Radon, Radium, and other Radioactivity in
	Water: Hydrogeologic Impact and Application to Indoor
	Contamination. Chelsea, MI. Lewis Publishers. 1987.
DATE	87/00/00
ABSTRACT	In 1982, WNRE instituted an environmental monitoring
	ensure that any adverse environmental effects arisin
	construction or operation of the URL were identified
	mitigated. As part of the pre-operational environmen
	measurements of natural radioactivity were made in s
	well waters of the vicinity. The results of these su
	the ongoing environmental monitoring program form th
	the present paper.

KEYWORDS
LOCATION
REFERENCE

MONITORING: groundwater, ecological impacts.

AUTHOR
TYPE
ORGANIZATION
TITLE

Williams, L.R.; Leggett, R.W.; Espegren, M.L.; Little
govt
Oak Ridge National Lab. TN (USA).
OPTIMIZATION OF SAMPLING FOR THE DETERMINATION OF TH
RADIUM-226 CONCENTRATION IN SURFACE SOIL.

PUBLISH
DATE
ABSTRACT

Aug 1987. 36 p.
87/08/00
This report describes a field experiment that identifies
optimal method for determination of compliance with
RA-226 guidelines for soil.

KEYWORDS
LOCATION
REFERENCE

MONITORING: analytical technique.

AUTHOR
TYPE
ORGANIZATION

Spiegler, Peter
govt
Environmental Evaluation Group, Health and Environment
Department, State of New Mexico. (USA).
PROPOSED PREOPERATIONAL ENVIRONMENTAL MONITORING PRO
WIPP.

PUBLISH
DATE
ABSTRACT

EEG-26, Santa Fe, November, 1984, 26pp.
84/11/00
Describes a recommended environmental surveillance p
State of New Mexico, for the WIPP site, and a framew
discussion prior to setting up a co-operative monito
program. The agreement for independent monitoring b
specifies objectives to be met by the program and in
baseline data collection prior to the operational ph
MONITORING:

KEYWORDS
LOCATION
REFERENCE

7007 Wyoming Blvd NE, Ste.F-2, Albuquerque, New Mexi
NFW 2.2-53-3

AUTHOR
TYPE
ORGANIZATION
TITLE

Elder, R.E.; Egert, G.W.; Johnson, A.R.; Osborne, W.
priv
Rockwell International Corp. WA. Rockwell Hanford Op
ROCKWELL HANFORD OPERATIONS ENVIRONMENTAL SURVEILLAN
REPORT, CALENDAR YEAR 1986.

PUBLISH
DATE
ABSTRACT

May 1987. 154 p.
87/05/00
Environmental surveillance of the separations area of
performed by Rockwell Hanford operations to assess a
the impacts of operations. It involves sampling and
from the major environmental pathways of exposure to
workers.

KEYWORDS
LOCATION
REFERENCE

MONITORING: ecological impacts, health.

AUTHOR
TYPE
ORGANIZATION

Carlyle, S.G.; Post, R.G.
govt
Nuclear Energy Agency. (France).

TITLE	THE ACTIVITIES, OBJECTIVES AND RECENT ACHIEVEMENTS OF PROBABILISTIC SYSTEMS ASSESSMENT CODES (PSAC) USER GROUP
PUBLISH	Waste Management '87: Waste Isolation in the US, Technical Programs and Public Education. Tucson, AZ, (USA). University of Arizona Nuclear Engineering Dept. 1987. p. 661-666.
DATE	87/00/00
ABSTRACT	The NEA probabilistic systems assessment (PSAC) user group was established in 85 by the agency as part of its program to the advancement of performance assessment methodology. This paper shows how the PSAC user group fits into the overall strategy of the RWMC program, gives the background to the creation of PSAC, its aims and recent achievements.
KEYWORDS	MONITORING:
LOCATION	
REFERENCE	
AUTHOR	Camus, H.; Carrere, D.; Simeon, C.
TYPE	
ORGANIZATION	CEA Etablissement de la Vallee du Rhone, France; CEA Centre d'Etudes Nucleaires de Cadarache, France.
TITLE	THE USE OF TRITIUM MEASUREMENTS FOR ENVIRONMENTAL MONITORING (French)
PUBLISH	May 1987. 19 p.
DATE	87/05/00
ABSTRACT	The development of fine methods in order to assess the capacity of the environment and evaluate the fate of releases requires to have sensitive bioindicators. This paper presents the results of a study in measuring organically bound tritium in food chain.
KEYWORDS	MONITORING: ecological impacts.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	WEATHERED BASALT GLASS: A NATURAL ANALOGUE FOR THE EVALUATION OF REACTION PROGRESS ON NUCLEAR WASTE GLASS ALTERATION.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Sweden) 9-11, 1985. p. 263.
DATE	85/09/00
ABSTRACT	
KEYWORDS	MONITORING: natural analogues, glass.
LOCATION	
REFERENCE	

FFFFFFFFFF
FFFFFFFFFF
FFFFFFFFFF

AUTHOR	Grambow, B.; Strachan, D.M.
TYPE	
ORGANIZATION	Hahn-Meitner-Inst. Berlin G.M.B.H., Germany, F.R.; P
TITLE	Northwest Lab., Richland, WA (USA). A COMPARISON OF THE PERFORMANCE OF NUCLEAR WASTE GL
PUBLISH	MODELLING.
DATE	January 1988. 13 p.
ABSTRACT	88/01/00 The purpose of this paper is to show that a dissolut precipitation model can be used to better understand of various system variables on glass dissolution.
KEYWORDS	MODELLING: glass, dissolution.
LOCATION	
REFERENCE	

AUTHOR	Sjaardema, G.D.; Kreig, R.D.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	A CONSTITUTIVE MODEL FOR THE CONSOLIDATION OF WIPP C AND ITS USE IN ANALYSES OF BACKFILLED SHAFT AND DRIF
PUBLISH	CONFIGURATIONS.
DATE	October 1987. 68 p.
ABSTRACT	87/10/00 A constitutive model for the consolidation of wet cr material is presented. The material parameters for t are derived from hydrostatic consolidation tests per wet salt taken from the waste isolation pilot plant.
KEYWORDS	MODELLING: salt.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	govt
ORGANIZATION	
TITLE	A FINITE-LINE HEAT TRANSFER CODE WITH AUTOMATED SENS
PUBLISH	CALCULATION CAPABILITY.
DATE	ORNL Report TM-9975, September 1986. 58 p.
ABSTRACT	86/09/00
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	

AUTHOR	Duffield, G.M.; Buss, D.R.; Stephenson, D.E.; Mercer
TYPE	priv
ORGANIZATION	Geotrans, Inc., Herndon, VA (USA).
TITLE	A GRID REFINEMENT APPROACH TO FLOW AND TRANSPORT MOD
PUBLISH	PROPOSED GROUNDWATER CORRECTIVE ACTION AT THE SAVANN
DATE	PLANT, AIKEN, SC.
ABSTRACT	1987. 46 p. 87/00/00 The regional scale model, calibrated by an automatic

KEYWORDS

least-squares procedure, resulted in a set of hydrau
parameter values consistent with other methods. Grou
velocities were used to perform particle tracking an
MODELLING: groundwater, radionuclide migration.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

TITLE
PUBLISH
DATE

ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Haug, A.
priv/govt
Sandia National Lab. NM; Intera Technologies, Inc.,
(USA).

A MODELLING STUDY OF THE CULEBRA DOLOMITE.
1987. 27 p.

87/00/00

A modelling study has been performed as part of the hydrologic characterization of the waste isolation p site in New Mexico.

MODELLING: groundwater.

AUTHOR
TYPE
ORGANIZATION

TITLE

PUBLISH
DATE

ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Jackson, C.P.

UKAEA Harwell Lab. Theoretical Physics Div.; Departm
Environment. London (UK).

A NOTE OF THE EQUATIONS USED TO MODEL FLOW AND TRANS
UNDERSATURATED ZONE.

February 1988. 19 P.

88/02/00

We consider the form of the equations used to model
flow and transport in partially saturated media.

MODELLING: groundwater.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT
KEYWORDS

LOCATION
REFERENCE

assoc

National Water Well Association. (USA).

A REGIONAL GROUNDWATER FLOW MODEL FOR PERFORMANCE AS
ANALYSES OF A POTENTIAL REPOSITORY LOCATION.

National Water Well Association Application Ground W
Conference, Columbus Ohio, 19-20 August 1985. p. 391
85/08/19

MODELLING: groundwater.

AUTHOR
TYPE
ORGANIZATION

Seiler, F.A.

priv

Lovelace Biomedical and Environmental Research Insti
(USA).

TITLE
PUBLISH
DATE
ABSTRACT

A RISK WEIGHTED STRATEGY OF STATISTICAL SAMPLING.

Nucl. Mater. Manage. July 1987. V. 16 p. 129-133.

87/07/00

A new strategy is proposed using differences in the
associated with different units of the sampling set
the frequency of sampling. The strategy is presented
general form and examples are given in the area of t
disposal of nuclear waste.

MODELLING: transport, disposal and storage alternati

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Braester, C.; Thunvik, R. (Isreal Inst. of Technolog

TYPE	Isreal)
ORGANIZATION	acad
TITLE	A STUDY OF FLOW THROUGH A FRACTURE NETWORK DESCRIBED STATISTICALLY DISTRIBUTED PROPERTIES.
PUBLISH	Nucl. Technol. December 1987. V.79(3) P.371-376.
DATE	87/12/00
ABSTRACT	An analysis of the confidence of flow solutions for stochastically generated hard rock formations study out with the aid of a simplified synthetic model.
KEYWORDS	MODELLING: fractures.
LOCATION	
REFERENCE	
AUTHOR	Nimick, F.; Williams, R.L.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	A THREE DIMENSIONAL GEOLOGIC MODEL OF YUCCA MOUNTAIN NEVADA.
PUBLISH	Sandia National Lab Report 83-2593. Oct. 1984. 72 p.
DATE	84/10/00
ABSTRACT	Modelling techniques were employed in generating a t dimensional description of the subterranean geology Mountain. The initial implementation of the three di model is a collection of surface representations, on for the base of each stratigraphic zone.
KEYWORDS	MODELLING: geologic disposal, tuff.
LOCATION	
REFERENCE	
AUTHOR	Hahne, K.
TYPE	assoc
ORGANIZATION	International Atomic Energy Agency. Vienna (Austria)
TITLE	ADVANCED THREE-DIMENSIONAL NUMERICAL TEMPERATURE CAL EXEMPLARY FOR THE GORLEBEN REPOSITORY. COMPARISON WI (SEMI)-ANALYTICAL CALCULATION.
PUBLISH	Proceedings of an International Symposium on the Bac Nuclear Fuel Cycle: Strategies and Options. Jointly the International Atomic Energy Agency and the Nucle
DATE	Agency of the OECD and held in Vienna, 11-15 May 198
ABSTRACT	87/00/00
KEYWORDS	Poster presentation.
LOCATION	MODELLING:
REFERENCE	
AUTHOR	Lovera, P.; Mangin, J.P.; Jorda, M. (CEA Centre D'Et Nucleaires de Fontenay-aux-Roses, France. Inst. de R Technologique et de Developpement Industriel); Lewi,
TYPE	govt
ORGANIZATION	CEA Centre D'Etudes Nucleaires de Fontenay-aux-Roses Dept. D'Analyse de Surete.
TITLE	ALPHA AND LONG-LIVED BETAGAMMA WASTE SOURCE TERM. A GENERATION MODEL FOR A DEEP CEMENTED WASTE REPOSITOR
PUBLISH	1987. 12 p.
DATE	87/00/00
ABSTRACT	According to the normal scenario of radioactivity re biosphere, only long-lived nuclides are able to migr significantly to the surface. A first generation mod concerning a cemented waste of hulls and ends deeply in a granitic medium, is in progress at CEA.

KEYWORDS
LOCATION
REFERENCE

MODELLING: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Dippold, G.; Wampler, J.
acad

ALTERNATIVES AND OPTIMIZATION OF THE WASTE MANAGEMEN
J. Inst. Nuclear Materials Management. V. 13. p. 249

In attempting to create optimum radioactive waste ma
systems, designers face various problems. WAD COM II
disposal cost model, assesses the cost effectiveness
waste treatment, packing and disposal options.
MODELLING: disposal and storage alternatives, econom

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Airey, P.L.; Golian, C.; Lever, D.A.

TITLE

Australian Atomic Energy Commission Research Establi
Hieghts.

PUBLISH

AN APPROACH TO THE MATHEMATICAL MODELLING OF THE URA
REDISTRIBUTION WITHIN ORE BODIES.

DATE

December 1987. 113 p.

ABSTRACT

87/12/00

The distributions of the uranium series isotopes in
ore body were predicted by a simple one-dimensional
isotopic migration parameters. A multiphase model ad
describes the redistribution of uranium and daughter

KEYWORDS
LOCATION
REFERENCE

radionuclides in the weathered zone of the ore bodie
MODELLING: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Shukla, B.S.; Dignam, M.J. (Toronto Univ., Ontario)
acad
PCGLA.

AN APPROXIMATION METHOD FOR DIFFUSION BASED LEACHING
Phys. Chem. Glasses. (Apr 1987) 28(2):85-94.

87/04/00

In connection with the fixation of nuclear waste in
matrix, equations have been derived for leaching mod
a uniform concentration gradient approximation, and
uniform flux, therefore requiring the use of only Fi
Law.

KEYWORDS
LOCATION
REFERENCE

MODELLING: leaching, glass.

AUTHOR
TYPE
ORGANIZATION
TITLE

Taylor, R.F.

govt

UKAEA Atomic Energy Research Establishment, Harwell.
AN INITIAL APPRAISAL OF ASPECTS OF QUALITY ASSURANCE
CONDITIONING OF RADIOACTIVE WASTES. PART II - FEATUR
PROCESS MODELLING AND QUALITY CONTROL WITH PARTICULA
TO THE CEMENT-MIXING AND THE GROUTING OF ILWS.

PUBLISH

Mar 1987. 49 p.

DATE

87/03/00

ABSTRACT

The main sections deal with general features of proc
and quality control firstly for homogeneous ILWS mix

KEYWORDS
LOCATION
REFERENCE

with cement, and secondly for heterogenous solid was immobilized by in-drum grouting.
MODELLING: cement.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Knowles, N.C.; Lowe, M.J.; Piper, D.
priv
Atkins & Groups. (UK).
AN UPDATE ON PROJECT COSA.
Nuclear Engineering and Design. Feb. 1989. V. 111(2)
89/02/00
The current status of a benchmark exercise to compare predictions of the thermal creep behaviour of rock s described. Interest centres on the reliability of pr long term behaviour of repositories for high level w geological formations.
MODELLING: geologic disposal.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Klett, R.D.; Treadway, A.H.; Hertel, E.S.; Garner, J
priv/govt
Sandia National Lab. NM (USA).; G2Vantel Ltd.,; Appl
Inc. NM (USA).
ANALYTIC MODELS OF NUCLIDE TRANSPORT IN SATURATED GE
May 1987. 325 p.
87/05/00
This report describes the TRION series of computer p consists of two major programs, the core program TRI performance assessment program SEDTRIN, and several programs.
MODELLING: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Bian, S.H.; Budden, M.J.; Yung, S.C.
govt
Pacific Northwest Lab. WA (USA).
APPLICATION OF GEOTHER/VT4 TO ASSESS GROUNDWATER TRA
HIGH-LEVEL RADIOACTIVE WASTE REPOSITORY.
May 1987. 18 p.
87/05/00
The Geother/vt4 code is a modified and improved vers geother code. It was applied to a two-dimensional si a single waste package container in a high-level was repository to predict the thermal-hydraulic environm steam formation may occur.
MODELLING: geology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Airey, P.L. (IAEA, Vienna, Austria); Come, B. (CEC); N.A. (BGS).
Commission of the European Communities, Luxembourg.
APPLICATION OF NATURAL ANALOGUE STUDIES TO THE LONG-
PREDICTION OF FAR-FIELD MIGRATION AT REPOSITORY SITE
P. 32-41. Natural Analogues in Radioactive Waste Dis
Proceedings of a symposium organized by the CEC and
Brussels. Graham & Trotman, 1987. 506 p. Radioactive

DATE	Management Series.
ABSTRACT	87/04/00 Evidence of compliance of proposed repositories with performance criteria will inevitably be based on com modelling.
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Golian, C.; Duerden, P. (Australian Atomic Energy Co Research Establishment, Lucas Heights) Come, B. (CEC); Chapman, N.A. (BGS).
TYPE	govt
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	APPLICATION OF OPEN SYSTEM MODELLING TO STUDIES OF S MINERALIZATION (KOONGARRA) AND ROCK MATRIX DIFFUSION (KRAEKEMAELA).
PUBLISH	P. 328-341. Natural Analogues in Radioactive Waste D Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	The open system modelling technique was developed to the results of the natural analogue study being cond Alligator Rivers region of the Northern Territory of
KEYWORDS	MODELLING: natural analogues.
LOCATION	
REFERENCE	
AUTHOR	Ishikawa, H.; Yokokawa, M.; Asai, K. (Japan Atomic E Research Inst., Tokai, Ibaraki).
TYPE	govt
ORGANIZATION	
TITLE	APPLICATION OF SOME ITERATIVE METHODS TO WIND FIELD
PUBLISH	Nippon Genshiryoku Gakki-Shi. Febuary 1987. V.29(2)
DATE	87/02/00
ABSTRACT	This paper describes the reduction of computation ti sparse linear equations obtained by discretization o three-dimensional Poisson's equation using the finit method.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Davis, E.C. (Oak Ridge National Lab., TN); Criag, P. (Environmental Consulting Engineers, Inc., Knoxville priv/govt
TYPE	
ORGANIZATION	
TITLE	APPLICATION OF THE FINITE ELEMENT GROUNDWATER MODEL RADIOACTIVE WASTE DISPOSAL SITE.
PUBLISH	Appl. Math. Model. April 1988. V.12(2) p. 141-153.
DATE	88/04/00
ABSTRACT	A finite element model for water transport through p (FEWA) has been applied to the unconfined aquifer at Ridge National Lab. soild waste storage area 6 engin facility.
KEYWORDS	MODELLING: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Nies, A. (Gesellschaft fuer Strahlen und Umweltforsc

TYPE
ORGANIZATION

Muenchen, Braunschweig, Germany, F.R. Inst. fuer Tie
Nuclear Energy Agency. Paris (France).

TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS

LOCATION

REFERENCE

APPLICATION OF UNCERTAINTY ANALYSIS IN ASSESSMENTS O
WASTE DISPOSAL IN THE FEDERAL REPUBLIC OF GERMANY.

P.237-250. Uncertainty Analysis for Performance Asse
Radioactive Waste Disposal Systems. Proceedings of a
workshop. Paris, France. Organization for Economic C
and Development. 1987. 258 p.

87/00/00

The computation of potential radiological consequenc
frame of long-term performance assessment of radioac
disposal is affected with considerable uncertainties
sources of uncertainties are identified and procedur
scenario and model uncertainties are presented.

MODELLING:

AUTHOR

TYPE

ORGANIZATION

TITLE

PUBLISH

DATE

ABSTRACT

Gelhar, L.W.

priv/govt

Swedish Nuclear Fuel and Waste Management Co., (Swed

APPLICATIONS OF STOCHASTIC MODELS TO SOLUTE TRANSPOR
FRACTURED ROCKS.

Jan. 1987. 63 p.

87/01/00

A stochastic theory for flow and solute transport in
variable aperture fracture bounded by sorbing porous
which solutes may diffuse, is developed using a pert
approximation and spectral solution techniques which
local statistical homogeneity. Recommendations from
presented.

MODELLING: radionuclide migration.

KEYWORDS

LOCATION

REFERENCE

AUTHOR

TYPE

ORGANIZATION

TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS

LOCATION

REFERENCE

Parriaux, A.; Tissieres, P.; Miserez, J.

assoc

Sous-Groupe Geologie de L'Agneb.

APPRECIATION DES MODELES HYDRODYNAMIQUES DU POINT DE
HYDROGEOLOGIQUE. (IN FRENCH).

January 28, 1986. 60 p. plus annexes.

86/01/28

Discusses hydrogeological modelling.

MODELLING: hydrogeology.

NFW 2.2-54-4

AUTHOR

TYPE

ORGANIZATION

TITLE

PUBLISH

Schweitzer, D.G.; Sastre, C.

govt

Brookhaven National Lab. NY (USA).

ASSUMPTIONS, UNCERTAINTIES, AND LIMITATIONS IN THE P
CAPABILITIES OF MODELS FOR SENSITIZATION IN 304 STAI
STEELS.

June 1987. 12 p.

DATE	87/06/00
ABSTRACT	A review of literature on sensitization in 304 stain has been made from what we believe would be the regu framework evaluating the claim that there is reasona assurance that predicts the absence of sensitization times and temperatures associated with a high-level repository at Yucca Mountain.
KEYWORDS	MODELLING: disposal and storage alternatives, steel.
LOCATION	
REFERENCE	
AUTHOR	Wilkinson, S.R.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	ATMOS: A MODEL OF RADIONUCLIDE MIGRATION IN THE ATMO
PUBLISH	1987. 9 p.
DATE	87/00/00
ABSTRACT	
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Come, B. (Commission of the European Communities, Br
TYPE	
ORGANIZATION	
TITLE	BENCHMARKING ROCK-MECHANICS COMPUTER CODES: THE COMM COSA.
PUBLISH	P. 55-60. Proceedings of the 6th International Congr Mechanics. Accord, MA (USA). A.A. Balkema Publishers
DATE	87/00/00
ABSTRACT	Twelve research teams in the European community part benchmark exercise for rock-mechanics computer codes disposal of radioactive waste in salt.
KEYWORDS	MODELLING: geologic disposal, salt, international.
LOCATION	
REFERENCE	
AUTHOR	Haegg, C.; Johansson, G.
TYPE	govt
ORGANIZATION	National Inst. of Radiation Protection, Stockholm, (
TITLE	BIOMOVs: AN INTERNATIONAL MODEL VALIDATION STUDY.
PUBLISH	16 November 1987. 10 p.
DATE	87/11/07
ABSTRACT	Biomovs (biosphere model validation study) is an int study where models used for describing the distribut radioactive and non-radioactive trace substances in and aquatic environments are compared and tested.
KEYWORDS	MODELLING: international, vegetation.
LOCATION	
REFERENCE	
AUTHOR	Chen, S.Y.; Yuan, Y.C.
TYPE	
ORGANIZATION	
TITLE	
PUBLISH	
DATE	
ABSTRACT	
KEYWORDS	
LOCATION	
REFERENCE	
AUTHOR	
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	CALCULATION OF HEALTH RISKS FROM SPENT NUCLEAR FUEL TRANSPORTATION ACCIDENTS.
PUBLISH	1987, 12 p.

DATE	87/00/00
ABSTRACT	Models developed to analyze potential radiological h from various accident scenarios during transportatio nuclear fuels are described.
KEYWORDS	MODELLING: transport, risk analysis, health.
LOCATION	
REFERENCE	
AUTHOR	Thunvik, R. (Royal Inst. of Tech., Stockholm, Sweden
TYPE	govt
ORGANIZATION	Swedish Nuclear Fuel and Waste Management Co., Stock
TITLE	CALCULATIONS ON HYDROCOIN LEVEL 2, CASE 1 USING THE MODEL. THERMAL CONVECTION AND CONDUCTION AROUND A FI TRANSFER EXPERIMENT.
PUBLISH	March 1987. 41 p.
DATE	87/03/00
ABSTRACT	The purpose of this project is to improve the unders various strategies for modelling groundwater flow fo assessment of final radioactive waste repositories.
KEYWORDS	MODELLING: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Baldi, G.; Borsetto, M.; Hueckel, T.
TYPE	assoc
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	CALIBRATION OF MATHEMATICAL MODELS FOR SIMULATION OF SEEPAGE AND MECHANICAL BEHAVIOUR OF BOOM CLAY.
PUBLISH	1987. 225 p.
DATE	87/00/00
ABSTRACT	This report presents results of research on the veri the validity of a generalized thermoelastoplastic-hy mathematical model elaborated at Ismes for descripti behaviour of boom clay.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Tsang, Chin-Fu
TYPE	
ORGANIZATION	Lawrence Berkeley Lab. CA (USA).
TITLE	COMMENTS ON MODEL VALIDATION.
PUBLISH	July 1987. 13 p.
DATE	87/07/00
ABSTRACT	The paper points out the inportance and usefulness o the separate roles of processes and geometric struct predictive modelling of the performance of a nuclear
KEYWORDS	repository or underground injection disposal of toxi
LOCATION	MODELLING:
REFERENCE	
AUTHOR	Tait, J.C.; Johnson, L.H.
TYPE	assoc
ORGANIZATION	Canadian Nuclear Society. (Canada).
TITLE	COMPUTER MODELLING OF ALPHA RADIOLYSIS OF AQUEOUS SO CONTACT WITH USED UO2 FUEL.
PUBLISH	Canadian Nuclear Society 2nd International Conferenc Radioactive Waste Management. Sept. 7-11, 1986. p. 6
DATE	86/09/00
ABSTRACT	

KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Ebeling, L.L.
TYPE	priv
ORGANIZATION	Reynolds Electrical and Engineering Co., Inc., Las V (USA).
TITLE	COMPUTER MODELLING OF GREATER CONFINEMENT DISPOSAL O WASTE AT THE NEVADA TEST SITE.
PUBLISH	October 1987. 12 p.
DATE	87/10/00
ABSTRACT	A 1.1 megacuri and 3.5 kilowatt waste source has bee metres down an auger hole in a tuffaceous alluvium f three years. Temperature and moisture have been moni surrounding soil during this time and two gaseous tr migration studies conducted to determine flow parame
KEYWORDS	MODELLING: radionuclide migration, tuff.
LOCATION	
REFERENCE	
AUTHOR	Wheeler, A.J.; Notley, K.R.
TYPE	acad/priv
ORGANIZATION	Dome Mines. ON; Queens University. ON, (Canada).
TITLE	COMPUTER MODELLING OF RADON-RELATED CONTAMINATION IN VENTILATION NETWORK.
PUBLISH	Institute Mining Metallurgy/Engineers (UK) Mine Vent Conference. June 13-19, 1984. p. 115-121.
DATE	84/06/00
ABSTRACT	Main features of a newly developed computer program radon-related contamination in the air of a mine ven network are described. Input to the program consists geometry, airflow distribution, dimensions, and rado characteristics of rock types.
KEYWORDS	MODELLING: radionuclide migration, geologic disposal
LOCATION	
REFERENCE	
AUTHOR	Fels, M.; Garred, L.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	COMPUTER SIMULATION OF THE TRANSPORT OF RADIONUCLIDE BUFFER MATERIAL IN AN UNDERGROUND NUCLEAR FUEL WASTE VAULT.
PUBLISH	Technical Record TR-146, 88 p.
DATE	84/00/00
ABSTRACT	
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Walton, J.C.; Sagar, B. (Rockwell Hanford Operations WA).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	priv
TITLE	Argonne National Lab. Il (USA).
PUBLISH	CORROSION MODEL FOR NUCLEAR WASTE CONTAINERS. P. 271-282. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	Theory of a mechanistic model for estimating the max

KEYWORDS
LOCATION
REFERENCE

uniform corrosion for a steel or copper container in repository environment is described.
MODELLING: corrosion, containment, steel.

AUTHOR
TYPE
ORGANIZATION
TITLE

Case, J.; Niou, S.; Pietz, J.; Wallace, M.; Zurkoff, priv
IT Corp. NM (USA).
COUPLED FLUID FLOW AND SALT CREEP ANALYSIS: SUMMARY.
WORK.

PUBLISH

Waste Management '87: Waste Isolation in the US, Tec
Programs and Public Education. Tucson, AZ, (USA). Un
Arizona Nuclear Engineering Dept. 1987. p. 615-620.

DATE
ABSTRACT

87/00/00
Current investigations at WIPP are evaluating the na
hydrologic barriers for the isolation of transuranic
waste at the repository horizon. Evaluation was perf
COUPLE, a computer code. The code is described and a
problem solved to illustrate the code's capabilities
MODELLING: hydrology, geologic disposal.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Sharland, S.M.; Tasker, P.W.; Tweed, C.J. (Harwell L
England).
priv
Argonne National Lab. Il. (USA).
COUPLING OF CHEMICAL AND TRANSPORT PROCESSES IN NEAR

PUBLISH
DATE
ABSTRACT

MODELLING.
P. 683-694. Scientific Basis for Nuclear Waste Manag
Pittsburgh, PA (USA). Materials Research Society. 19
87/00/00
Near-field modelling is concerned with the descripti
migration, chemical and degradation processes that m
within an engineered radioactive waste repository an
immediate environs. In this paper, they describe the
program CHEQMATE (Chemical Equilibrium with Migratio
Transport Equations), which has many applications in
various changes in chemistry in the near-field.
MODELLING: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Kuhn, W.L.
Pacific Northwest Lab. WA (USA).
DATA AND INFORMATION NEEDS FOR WPP TESTING AND COMPO
MODELLING.

PUBLISH

Proceedings of salt repository project's workshop on
migration. March 1987, p. 19-21

DATE
ABSTRACT

87/03/00
The modelling task of the waste package program (WPP
develop conceptual models that describe the interact
waste package components with their environment and
interactions among waste package components.
MODELLING: salt, containment.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Worley, B.A.; Oblow, E.M.; Pin, F.G.; Maerker, R.E.;

TYPE	J.E.; Wright, R.Q.; Lucius, J.L.
ORGANIZATION	govt
TITLE	Oak Ridge National Lab. TN (USA). DETERMINISTIC METHODS FOR SENSITIVITY AND UNCERTAINTY LARGE-SCALE COMPUTER MODELS.
PUBLISH	1987. 34 p.
DATE	87/00/00
ABSTRACT	The fields of sensitivity and uncertainty analysis a by statistical techniques when large-scale modelling being analysed. Tis paper reports on the development availability of two systems, GRESS and ADGEN.
KEYWORDS	MODELLING: risk analysis.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	DEVELOPMENT OF THE CODE MELODIE FOR LONG TERM RISK A NUCLEAR WASTE REPOSITORIES.
PUBLISH	
DATE	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 817.
ABSTRACT	85/09/00
KEYWORDS	MODELLING: disposal and storage alternatives.
LOCATION	
REFERENCE	
AUTHOR	Werme, L.O.; Grambow, B. (Swedish Nuclear Fuel and W Management Co., Stockholm).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. Il (USA). DEVELOPMENT, APPLICATION AND VALIDATION OF MODELS FO PACKAGE LONG-TERM PERFORMANCE; CURRENT TRENDS.
PUBLISH	P. 29-43. Scientific Basis for Nuclear Waste Managem Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	Current trends in modelling waste package performanc reviewed mainly from the perspective of the Swedish
KEYWORDS	MODELLING: containment.
LOCATION	
REFERENCE	
AUTHOR	Hoyle, S.Q.; Grutzeck, M.W. (Pennsylvania State Univ Park).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	acad
TITLE	Argonne National Lab. Il (USA). EFFECT OF PORE SOLUTION COMPOSITION ON CESIUM LEACHA CEMENT-BASED WASTE FORMS.
PUBLISH	P. 309-317. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	The relationship of pore solution composition to obs behaviour for cesium-doped, cement-based waste form demonstrated. A leaching model is proposed, based on diffusion and homogenization of the pore solution an followed by re-equilibration of the waste form with pore solution over the long term.
KEYWORDS	MODELLING: leaching, cement.

LOCATION REFERENCE	
AUTHOR	Atkinson, A.; Ewart, F.T.; Pugh, S.Y.R.; Rees, J.H.; S.M.; Tasker, P.W.; Wilkins, J.D. (UKAEA Harwell Lab Div.)
TYPE	assoc
ORGANIZATION	United Kingdon Nirex, Ltd.
TITLE	EXPERIMENTAL AND MODELLING STUDIES OF THE NEAR-FIELD FOR NIREX REPOSITORY CONCEPTS.
PUBLISH	February 1988. 14 p.
DATE	88/02/00
ABSTRACT	A research programme is described which is designed investigate the chemical conditions in the near fiel concrete based repository and the behavior of the ra important nuclides under these conditions.
KEYWORDS	MODELLING: radionuclide migration, concrete, chemist
LOCATION REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	EXPERIMENTATION AND MODELLING OF U, TH, AND LANTHANI IN FISSURED ROCKS: INFLUENCE OF COMPLEXATION.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 755.
DATE	85/09/00
ABSTRACT	
KEYWORDS	MODELLING: radionuclide migration.
LOCATION REFERENCE	
AUTHOR	Huber, H.D.; Chockie, A.D.; Hostick, C,J,; Otis, P.T R.A.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	FACSIM/MRS (MONITORED RETRIEVABLE STORAGE)-2: STORAG SHIPPING MODEL DOCUMENTATION AND USER'S GUIDE.
PUBLISH	June 1987. 175 p.
DATE	87/06/00
ABSTRACT	The facsim/mrs-2 model simulates the MRS storage and operations, which include handling canistered spent secondary waste in the shielded canyon cells, in ons storage, and in repository shipping cask loading are
KEYWORDS	MODELLING: containment, waste handling and emplaceme monitoring, cask.
LOCATION REFERENCE	
AUTHOR	Huyakorn, P.S.; Jones, B.G.; Parker, J.C.; Wadsworth
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	FINITE ELEMENT SIMULATION OF MOISTURE MOVEMENT AND S TRANSPORT IN A LARGE CAISSON.
PUBLISH	Modelling Study of Solute Transport in the Unsaturat Workshop Proceedings. April 1987. p. 117-173.
DATE	87/04/00
ABSTRACT	This report deals with the results of tests simulati transport performed on compacted, crushed bandelier Caisson.

KEYWORDS
LOCATION

MODELLING: radionuclide migration.

REFERENCE

AUTHOR Chan, T.; Scheier, N. (AECL, Whiteshell Nuclear Research Establishment, Pinawa, Man.).
TYPE govt
ORGANIZATION Atomic Energy of Canada Ltd.
TITLE FINITE-ELEMENT SIMULATION OF GROUNDWATER FLOW AND HEAT
RADIONUCLIDE TRANSPORT IN A PLUTONIC ROCK MASS.
PUBLISHED P. 41-46. Proceedings of the 6th International Congress
MECHANICS. Accord, MA (USA). A.A. Balkema Publishers
DATE 87/00/00
ABSTRACT A three-dimensional finite-element code, MOTIF, has been developed to model the coupled processes of groundwater heat transfer and solute transport in the vicinity of a hypothetical nuclear fuel waste vault in plutonic rock.
KEYWORDS
LOCATION
REFERENCE MODELLING: groundwater, radionuclide migration, gran

AUTHOR
TYPE govt
ORGANIZATION Battelle Memorial Inst. Columbus, OH. Office of Nuclear Isolation.
TITLE FIRST STATUS REPORT ON REGIONAL GROUNDWATER FLOW MODIFICATION
VACHERIE DOME, LOUISIANA.
PUBLISHED Battelle Memorial Inst. Report ONWI-602. July 1986.
DATE 86/07/00
ABSTRACT
KEYWORDS
LOCATION
REFERENCE MODELLING: groundwater.

AUTHOR Borders, D.M.; Hyndman, D.W.; Huff, D.D.
TYPE govt/acad
ORGANIZATION Tennessee Univ., Knoxville (USA); Oak Ridge Associated Universities, Inc. TN; Oak Ridge National Lab, TN (USA)
TITLE FORECASTING CONTAMINANT CONCENTRATIONS: SPILLS IN THE
CREEK BASIN.
PUBLISHED 1987. 20 p.
DATE 87/00/00
ABSTRACT The streamflow synthesis and reservoir regulation model installed and sufficiently calibrated for use in managing accidental release of contaminants in surface waters of the White Oak Creek watershed at ORNL.
KEYWORDS
LOCATION
REFERENCE MODELLING: ecological impacts, hydrology.

AUTHOR Nicolosi, S.L. (Battelle Memorial Institute, Columbus, OH); Bates, J.K.; Seefeldt, W.B. (eds.)
TYPE acad
ORGANIZATION Argonne National Lab. IL (USA).

TITLE	GENERALIZED MODEL FOR THE RADIOLYSIS OF GROUNDWATERS
PUBLISH	CHEMISTRY AND INFLUENCES.
DATE	P. 671-679. Scientific Basis for Nuclear Waste Manag
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 1987/00/00
	A groundwater radiolysis model has been developed at Battelle-Columbus which is applicable to groundwater bicarbonate species. This paper describes the chemi and influences of bicarbonate species in the model.
KEYWORDS	MODELLING: chemistry, groundwater.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	GEOCHEMICAL MODELLING OF THE ALTERATION OF A GRANITI
PUBLISH	A REPOSITORY FOR SPENT NUCLEAR FUEL.
DATE	Nuclear Waste Management Symposium. Stockholm (Swede
ABSTRACT	9-11, 1985. p. 517.
KEYWORDS	85/09/00
LOCATION	MODELLING:
REFERENCE	

AUTHOR	Lunden, I. (Chambers Univ. of Tec., Goeteborg, Swede
TYPE	acad
ORGANIZATION	Technische Univ. Muenchen, Garching, Germany, F.R. I
	Radiochemie; Commission of the European Communities, (Belgium).
TITLE	GEOCHEMICAL MODELLING USING THE PHREEQE CODE.
PUBLISH	P. 102. Chemistry and Migration Behavior of Actinide
DATE	Products in the Geosphere. Abstracts. 1987. 196 p.
ABSTRACT	87/00/00
KEYWORDS	Published in summary form only.
LOCATION	MODELLING: geology, chemistry.
REFERENCE	

AUTHOR	Buxton, B.E. (ed.).
TYPE	govt
ORGANIZATION	Battelle Columbus Div. OH (USA).
TITLE	GEOSTATISTICAL SENSITIVITY, AND UNCERTAINTY METHODS
	GROUNWATER FLOW AND RADIONUCLIDE TRANSPORT MODELLING
PUBLISH	PROCEEDINGS.
DATE	1989. 658 p.
ABSTRACT	89/00/00
	The overall theme of the DOE/AECL '87 conference was application of statistical methods for sensitivity a uncertainty analysis to nuclear waste disposal flow. transport modelling. This document reports on thirty

KEYWORDS	different presentations.
LOCATION	MODELLING: groundwater, radionuclide migration.
REFERENCE	

AUTHOR	Mitchell, P.J.; Kachele, D.G.
--------	-------------------------------

TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA); UNC Nuclear Industr (USA).
TITLE	GROUND WATER FLOW MODELING AT A HAZARDOUS WASTE SITE REGULATORY COMPLIANCE.
PUBLISH	Jan 1987. 23 p.
DATE	87/01/00
ABSTRACT	The Pacific Northwest Laboratory has developed a mod unconfined groundwater flow system that is located b hazardous waste facility and is subject to regulatio in the Resource Conservation and Recovery Act. Ultim modeling will assist in additional site characteriza will be used to support the evaluation of future act MODELLING: groundwater, siting.
KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	Mitchell, P.J.; Freshley, M.D.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	GROUND-WATER MONITORING AND MODELING AT THE HANFORD
PUBLISH	Jan 1987. 6 p.
DATE	87/01/00
ABSTRACT	The ground-water monitoring program at the Hanford s southeastern Washington state is continually evolvin response to changing operations at the site, changes ground-water flow system, movement of the constituen aquifers, and regulatory requirements. Sampling and ground water, along with ground-water flow and solut modeling are used to evaluate the movement and resul distributions of radionuclides and hazardous chemica constituents in the unconfined aquifer.
KEYWORDS	MODELLING: monitoring, groundwater.
LOCATION	
REFERENCE	

AUTHOR	Mailen, J.C.; Roddy, J.W.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. TN (USA).
TITLE	HOW WELL DOES ORIGEN PREDICT SPENT LWR FUEL CHARACTE
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 575-580.
DATE	87/00/00
ABSTRACT	The ORIGEN computer code is widely used to estimate radionuclide content of irradiated reactor fuel and

KEYWORDS	resultant heat generation and radiation levels assoc such fuel. This survey summarizes the fuel data avai open literature and, where given, the calculated val ORIGEN. For additional analyses of well-characterize fuel samples to improve the validation of ORIGEN2 ar
LOCATION	MODELLING: waste characterization.
REFERENCE	

AUTHOR	Wilkinson, S.R.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	HYDROS: A MODEL OF RADIONUCLIDE MIGRATION IN SURFACE
PUBLISH	1987. 8 p.
DATE	87/00/00

ABSTRACT
KEYWORDS
LOCATION
REFERENCE

MODELLING: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE

Malbrain, C.M.; Lester, R.K.
priv
Wastechem Corp., NJ (USA).
IMPROVED ENVIRONMENTAL PATHWAY MODEL FOR ASSESSING H
WASTE REPOSITORY RISKS.

PUBLISH
DATE
ABSTRACT

Health Phys. Nov. 1987. V. 53(5) p. 473-486.
87/11/00
An environmental pathway model useful for assessing
postclosure radiological risks from high-level waste
repositories has been developed and is described her
MODELLING: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Panahi, Zahra (Water Resources Center, Desert Resear
University of Nevada).

TITLE

acad
Nuclear Waste Project Office, State of Nevada Agency
Projects

PUBLISH
DATE
ABSTRACT

INVENTORY OF NUMERICAL CODES AVAILABLE FOR HIGH-LEVE
WASTE REPOSITORY PERFORMANCE MODELING AT YUCCA MOUNT
NWPO-TR-007-87, Carson City, June 1987, 147pp.
87/06/00

KEYWORDS
LOCATION
REFERENCE

Characterizes numerical codes available and identifi
information on current geohydrological modeling capa
applied to nuclear waste repository sites.
MODELLING: hydrogeology.
Capitol Complex, Carson City, Nevada 89710
NFW 2.2-54-3

AUTHOR
TYPE

Mohiuddin, G.

ORGANIZATION

Bundesministerium fuer Umwelt-, Naturschutz und
Reaktorsicherheit, Bonn, Germany, F.R.; Gesellschaft
Reaktorsicherheit M.B.H., Koeln, Germany, (F.R.).
TITLE
INVESTIGATION OF THE BEHAVIOR OF A PILLAR UNDER ROCK
GEOTHERMAL TEMPERATURE WITH THE STEALTH COMPUTER PRO
German)

PUBLISH

January 1987. 73 p. Schriftenreihe Reaktorsicherheit
Strahlenschutz. -Ergebnisberichte, Untersuchungen,
Gutachten.

DATE
ABSTRACT

87/01/00
In this calculation, the behavior of open hollow spa
mine under rock load and at geothermal temperature w
and a pillar was selected for this.
MODELLING: geology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Snellman, M.; Uotila, H; Rantanen, J. (Technical Res
of Finland, ESPOO)
Bates, J.K.; Seefeldt, W.B. (eds.)

TYPE
ORGANIZATION
TITLE

Argonne National Lab. IL (USA).
LABORATORY AND MODELLING STUDIES OF SODIUM BENTONITE
INTERACTION.

PUBLISH	P. 781-790. Scientific Basis for Nuclear Waste Manag
DATE	Pittsburgh, PA (USA). Materials Research Society. 19
ABSTRACT	87/00/00 According to the present Finnish concept sodium bent used as a buffer material in the repository for high waste.
KEYWORDS	MODELLING: groundwater, buffers.
LOCATION	
REFERENCE	
AUTHOR	Nykyri, M.; Harkonen, H.; Tusa, E.H. (Technical Rese
TYPE	of Finland, Otakaari); Post, R.G. (ed.).
ORGANIZATION	govt
TITLE	LABORATORY SCALE MODELLING OF THE FINNISH REACTOR WA
PUBLISH	SYSTEMS.
DATE	p. 512-520. Waste Management '87: Waste Isolation in
ABSTRACT	Technical Programs, and Public Education. Tucson, AZ
	Arizona Nuclear Engineering Dept. 1987.
	87/00/00
	The aim of the work is to model experimentally the i
	constructions of two reactor waste repositories. The
	of the multibarrier systems was started on a laborat
	using the same principal materials as in the Finnish
	waste disposal concepts.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	

AUTHOR	Cole, C.R.; Nichololson, T.J.; Davis, P.; McCartin, T
TYPE	govt
ORGANIZATION	Sandia National Labs. NM (USA).; Nuclear Regulatory
TITLE	Washington, DC (USA).; Pacific Northwest Lab. WA (US
PUBLISH	LESSONS LEARNED FROM THE HYDROCOIN EXPERIENCE.
DATE	March 1987. 18 p.
ABSTRACT	87/03/00 This report was prepared for the Hydrocoin coordinat
	that directs the hydrologic code intercomparison stu
	summarizes the 'lessons' learned to date, principall
	verification and validation phases.
KEYWORDS	MODELLING: groundwater, international, hydrology.
LOCATION	
REFERENCE	

AUTHOR	Beavers, J.A.; Thompson, N.G.; Markworth, A.J.; Cial
TYPE	Majumdar, B.S.; McCoy, J.K.
ORGANIZATION	priv
TITLE	Battelle Columbus Div. OH (USA).
PUBLISH	LONG-TERM PERFORMANCE OF CONTAINER MATERIALS FOR HIG
DATE	WASTE: (TECHNICAL REPORT, APR.1982- AUG. 1987).
ABSTRACT	November 1987, 427 p.
	87/11/00
	This report describes the results of experimental an
	studies of high-level waste container degradation. M
	studies focussed on general corrosion and pitting co
	with the models being extended to account for more r
	conditions.
KEYWORDS	MODELLING: corrosion, containment.
LOCATION	
REFERENCE	

AUTHOR
TYPE
ORGANIZATION

Chartier, M.

TITLE

CEA Centre D'etudes Nucleaire de Fontenay-aux-Roses,
Dept. de Protection Sanitaire.

PUBLISH
DATE

MANUAL AND USER GUIDE OF THE TRIDIMENSIONAL MODEL OF
CIRCULATION: OCEAN. (in French)
October 1987. 52 p.

ABSTRACT

87/10/00

The manual describes the assumptions set and the cal
which lead from the Navier-Stokes equations to the g
circulation model ocean.

KEYWORDS
LOCATION
REFERENCE

MODELLING: marine disposal.

AUTHOR

Shea, M. (Battelle Memorial Institute, Willowbrook,
of Waste Technology Development); Come, B. (CEC); Ch
(BGS).

TYPE

acad

ORGANIZATION
TITLE

Commission of the European Communities, Luxembourg.
MARYSVALE NATURAL ANALOGUE STUDY: FEASIBILITY PHASE
RESULTS.

PUBLISH

P. 275-288. Natural Analogues in Radioactive Waste D
Proceedings of a Symposium Organized by the CEC and
Brussels, BE, on 28-30 April 1987. London. Graham an
1987. 506 p. Radioactive Waste Management Series.

DATE

87/04/00

ABSTRACT

The major focus of the study is the elucidation of t
transport of nuclides in a hydrothermal system assoc
some uranium veins within quartz monzonite and grani

KEYWORDS
LOCATION
REFERENCE

MODELLING: thermodynamics.

AUTHOR
TYPE
ORGANIZATION
TITLE

Reimus, P.W.

priv

Pacific Northwest Lab. WA (USA).

MASBAL: A COMPUTER PROGRAM FOR PREDICTING THE COMPOS
NUCLEAR WASTE GLASS PRODUCED BY A SLURRY-FED CERAMIC
July 1987. 129 p.

PUBLISH
DATE

87/07/00

ABSTRACT

This report is a user's manual for the MASBAL comput
MASBAL's objectives are to predict the composition o
waste glass produced by a slurry-fed ceramic melter,
knowledge of process conditions.

KEYWORDS
LOCATION
REFERENCE

MODELLING: waste characterization.

AUTHOR
TYPE
ORGANIZATION
TITLE

Chen, B.

govt

MATHEMATICAL MODELLING AND EVALUATION OF RADIONUCLID
PARAMETERS FROM THE ANL LABORATORY ANALOG PROGRAM.

PUBLISH
DATE

ANL Report 84-13. July 1984. 33 p.

ABSTRACT

84/07/00

A model simulating long-term radioactive waste migra
processes by groundwater flowing through a high-leve
is developed.

KEYWORDS
LOCATION

MODELLING: radionuclide migration.

REFERENCE

AUTHOR	Wilkins, B.J.S.; Rigby, G.L.; Heinrich, W.F.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	MCROC - A MODEL TO ESTIMATE TIME-DEPENDENT MICROCRAC PLUTONIC ROCK DUE TO HEAT.
PUBLISH	1987. 35 p.
DATE	87/00/00
ABSTRACT	

KEYWORDS	MODELLING: thermodynamics, granite.
LOCATION	
REFERENCE	

AUTHOR	Lewi, J.; Assouline, M.; Bareau, J.; Raimbault, P.
TYPE	govt
ORGANIZATION	CEA Centre d'etudes Nucleaires de Fontenay-aux-Roses
TITLE	MELODIE: A GLOBAL RISK ASSESSMENT MODEL FOR RADIOACT REPOSITORIES.
PUBLISH	March 1987. 35 p.
DATE	87/03/00
ABSTRACT	

The institute of Protection and Nuclear Safety (IPSN part of the French Atomic Energy Commission has deve 1984, in collaboration with different groups inside the C.E.A. a computer model for risk assessment of n repositories in deep geological formations.

MODELLING: geologic disposal.

KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	Hwang, S.T.
TYPE	govt
ORGANIZATION	Environmental Protection Agency, Washington, DC (USA)
TITLE	METHODS FOR ESTIMATING ON-SITE AMBIENT AIR CONCENTRA DISPOSAL SITES.
PUBLISH	Nucl. Chem. Waste Management. (1987). V. 7(2) p. 95-
DATE	87/00/00
ABSTRACT	

Currently, Gaussian type dispersion modelling and po approximation are combined to estimate the ambient a concentrations of pollutants dispersed downwind of a emission source, using the approach of virtual point approximation. This Gaussian dispersion modelling be accurate as the receptor comes closer to the source, inapplicable for the estimation of on-site ambient a concentrations at disposal sites. Two variations of techniques are presented, and their predictions are

MODELLING: radionuclide migration.

KEYWORDS	
LOCATION	
REFERENCE	

AUTHOR	Peterson, S.R.; Hostetler, C.J.; Deutsch, W.J.; Cowa
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	MINTEQ USER'S MANUAL.
PUBLISH	Feb. 1987. 156 p.
DATE	87/02/00
ABSTRACT	

This manual will aid the user in applying the MINTEQ computer code to model aqueous solutions and the int aqueous solutions with hypothesized assemblages of s

MODELLING:

KEYWORDS	
LOCATION	

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

Oren, T.I.; Elzas, M.S.; Sheng, G.
acad

MODEL RELIABILITY AND SOFTWARE QUALITY ASSURANCE IN
NUCLEAR FUEL WASTE MANAGEMENT SYSTEMS. WASTE MANAGEM
1985. p. 381-396.
85/00/00

MODELLING: waste management.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Wanner, H. (Organization for Economic Cooperation and
Nuclear Energy Agency, NEA Data Bank, Cedex, France)

MODELLING INTERACTION OF DEEP GROUNDWATERS WITH BENT
RADIONUCLIDE SPECIATION.

Nucl. Technol. December 1987. V.79(3) P.338-347.
87/12/00

Based on available experimental data on the interact
bentonite and groundwater, a model has been develop
represents a means of extrapolation from laboratory
conditions in compacted bentonite.

MODELLING: groundwater, chemistry.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Herzog, F. (Eidgenoessisches Inst. fuer Reaktorforsch
Wuerenlingen, Switzerland); Come, B. (CEC); Chaman,
acad

Commission of the European Communities, Luxembourg.
MODELLING ISOTOPE DISTRIBUTIONS IN BORECORES.

P. 239-248. Natural Analogues in Radioactive Waste D
Proceedings of a Symposium Organized by the CEC and
Brussels, BE, on 28-30 April 1987. London. Graham an
1987. 506 p. Radioactive Waste Management Series.
87/00/00

The distribution and possible mobilization of natura
radionuclides in the neighbourhood of a water-bearin
in rocks may provide valuable information for the un
of transport mechanisms thought to determine the lon
behavior of a radioactive waste repository.

MODELLING: radionuclide migration.

AUTHOR

TYPE

Dran, J.K.; Langevin, Y.; Doorhyee, E.; Petit, J.C.
Orsay, France)

Bates, J.K.; Seefeldt, W.B. (eds.)

ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	MODELLING OF THE DISSOLUTION OF SILICATE GLASSES BY
PUBLISH	CODE (ETCH).
DATE	P. 559-569. Scientific Basis for Nuclear Waste Manag
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 19
KEYWORDS	87/00/00
LOCATION	A Monte-Carlo code has been developed to infer disso
REFERENCE	of silicate glasses from their chemical composition.
	MODELLING: glass, dissolution.
AUTHOR	Berner, U.R. (Swiss Federal Institute for Reactor Re
	Wurenlingen).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt
TITLE	Argonne National Lab. IL (USA).
PUBLISH	MODELLING POREWATER CHEMISTRY IN HYDRATED PORTLAND C
DATE	P. 331-341. Scientific Basis for Nuclear Waste Manag
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 19
	87/00/00
	Extensive employment of concrete is foreseen in radi
	repositories. A prerequisite for modelling the inter
	between concrete and formation waters is characteriz
	concrete system. A model which simulates the hydrati
	Portland cement assuming complete hydration of the m
	minerals is presented.
KEYWORDS	MODELLING: cement.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	MODELLING RADIONUCLIDE SPECIATION AND SOLUBILITY LIM
PUBLISH	NEAR FIELD OF A DEEP REPOSITORY.
DATE	Nuclear Waste Management Symposium. Stockholm (Swede
ABSTRACT	9-11, 1985. p. 509.
KEYWORDS	85/09/00
LOCATION	
REFERENCE	MODELLING: radionuclide migration.
AUTHOR	Springer, E.P.; Fuentes, H.R. (eds.)
TYPE	govt/acad
ORGANIZATION	Los Alamos National Lab. NM; Texas Univ., El Paso. D
	Engineering; Nuclear Regulatory Commission, Washingt
TITLE	Div. of Waste Management.
PUBLISH	MODELLING STUDY OF SOLUTE TRANSPORT IN THE UNSATURAT
	WORKSHOP PROCEEDINGS.
	April 1987. 248 p.
DATE	87/04/00
ABSTRACT	Issues addressed were the adequacy of the data for t
	models, effectiveness of the models to represent the
	particular information provided by the models, the r
	caisson experiments in providing fundamental knowled
	porous-media water flow and solute transport, and th
	of geochemistry to the transport of nonconservative

KEYWORDS
LOCATION
REFERENCE

MODELLING: chemistry.

AUTHOR
TYPE
ORGANIZATION

Berner, U.R. (Eidgenoessisches Inst. fuer Reaktorfor
Wuerlingen, Switzerland)
acad
Technische Univ. Muenchen, Garching, Germany, F.R. G.
Radiochemie; Commission of the European Communities
(Belgium).

TITLE

MODELLING THE INCONGRUENT DISSOLUTION OF HYDRATED CE
MINERALS.

PUBLISH

P. 94. Chemistry and Migration Behavior of Actinides
Products in the Geosphere. Abstracts. 1987. 196 p.

DATE

87/00/00

ABSTRACT

Published in summary form only.

KEYWORDS

MODELLING: chemistry.

LOCATION

REFERENCE

AUTHOR
TYPE
ORGANIZATION

Pantelis, G.

TITLE

Australian Atomic Energy Commission Research Establi
Heights.

PUBLISH

MODELLING WATER AND CONTAMINANT TRANSPORT IN THE RUM
OVERBURDEN HEAPS.

DATE

April 1987. 17 .

ABSTRACT

87/04/00

An outline is given of a computer model for water an
transport in and around overburden heaps, with those
Jungle mine site as a specific example.

KEYWORDS

MODELLING: radionuclide migration.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Ross, B.
priv

TITLE

MODELS FOR CALCULATING DISSOLUTION RATES OF HIGH-LEV
Nucl. Safety. July-Sept. 1987. V. 28(3) p. 362-373.

PUBLISH

87/07/00

DATE

ABSTRACT

The rates at which nuclides contained in high-level
released into solution may be controlled by chemical
equilibrium solubilities, or solid state diffusion.
these are presented.

KEYWORDS
LOCATION
REFERENCE

MODELLING: radionuclide migration.

AUTHOR

Cadelli, N. (CEC, Brussels, Belgium. Directorate Gen
Research Science and Development)
Come, B. (CEC); Chapman, N.A. (BGS).

TYPE

ORGANIZATION

Commission of the European Communities, Luxembourg.
NATURAL ANALOGUES AND PERFORMANCE ASSESSMENTS: A POI
BASED ON THE PAGIS EXPERIENCE.

PUBLISH

P. 3-11. Natural Analogues in Radioactive Waste Disp
Proceedings of a symposium organized by the CEC and
Brussels. Graham & Trotman, 1987. 506 p. Radioactive
Management Series.

DATE

87/04/00

ABSTRACT

In the light of the methodologies set up and implemented for performance assessment studies, with particular reference to the presently available results from the PAGIS exercise, the two broad areas in which natural analogue studies might represent a support to PA studies are:

- **MODELLING:** monitoring, natural analogues.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Lever, D.A.
govt
Department of the Environment. London (UK).
NATURAL ANALOGUES AND RADIONUCLIDE TRANSPORT MODEL V
Aug 1987. 9 p.
87/08/00
This paper reviews possible roles for natural analog
point of view of those involved with the development
mathematical models for radionuclide transport and w
of these models in repository safety assessments.
MODELLING: natural analogues, radionuclide migration

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Lever, D.A. (UKAEA Harwell Lab, Theoretical Physics B. (CEC); Chapman, N.A. (BGS).

Commission of the European Communities, Luxembourg. NATURAL ANALOGUES AND RADIONUCLIDE TRANSPORT MODEL V P. 23-31. Natural Analogues in Radioactive Waste Dis Proceedings of a symposium organized by the CEC and Brussels. Graham & Trotman, 1987. 506 p. Radioactive Management Series.

87/04/00

In this paper, some possible roles for natural analogues are discussed from the point of view of those involved in the development of mathematical models for radionuclide

DATE
ABSTRACT

KEYWORDS

LOCATION

REFERENCE

and with the use of these models in repository safety assessments.

MODELLING: natural analogues, safety analysis, radio migration.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Come, B. (Commission of the European Communities, Brussels).
Chapman, N.A. (British Geological Survey, Keyworth).
Commission of the European Communities, Luxembourg.
NATURAL ANALOGUES IN RADIOACTIVE WASTE DISPOSAL.
London, UK. Graham & Trotman. 1987. 506 p. Radioactive
management series.

DATE
ABSTRACT

The purpose of this symposium was to present a state survey of several years research studying 'natural analogues' in order to validate predictive models of the long-term behaviour of radioactive waste re MODELLING: safety analysis, radionuclide migration, and natural analogues.

KEYWORDS

LOCATION

REFERENCE

AUTHOR

Nicholson, T.J.; McCartin, T.J.; Davis, P.A.; Beyele

TYPE	Management Branch, Div. of Engineering Safety, Office
ORGANIZATION	Regulatory Research, US Nuclear Regulatory Commission
TITLE	Washington, DC)
	Post, R.G. (ed.)
	govt
PUBLISH	NRC EXPERIENCES IN HYDROCOIN: AN INTERNATIONAL PROJECT
	STUDYING GROUNDWATER FLOW MODELLING STRATEGIES.
	P. 201-208. Waste Management '87: Waste Isolation in
	Technical Programs, and Public Education. Tucson, AZ
	of Arizona Nuclear Engineering Dept. 1987.
DATE	87/00/00
ABSTRACT	The hydrologic code intercomparison study (HYDROCOIN)
	international study designed to investigate various
	modelling strategies used to analyze the performance
	high-level waste disposal sites. The various groundwater
	considered are to be used for safety assessments of
	high-level radioactive waste facilities.
KEYWORDS	MODELLING: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Glakpe, E.K.
TYPE	acad
ORGANIZATION	Howard Univ., Washington, DC (USA).
TITLE	NUMERICAL COMPUTATIONS OF NATURAL CONVECTION HEAT TRANSFER
	IRREGULAR GEOMETRIES: FINAL TECHNICAL REPORT.
PUBLISH	23 January 1987. 6 p.
DATE	87/01/23
ABSTRACT	The goal of the research program at Howard Univ. is
	and document a general purpose computer code that can
	obtain flow and heat transfer data for the transport
	of spent fuel configurations.
KEYWORDS	MODELLING: thermodynamics.
LOCATION	
REFERENCE	
AUTHOR	Sjaardema, G.D.; Krieg, R.D.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	NUMERICAL MODELLING OF INTERACTIONS BETWEEN CRUSHED
	SALT.
PUBLISH	1987. 22 p.
DATE	87/00/00
ABSTRACT	The results of several analyses studying the interaction
	intact salt and crushed salt in realistic field configurations
	such as backfilled shafts and drifts, will be presented.
KEYWORDS	MODELLING: salt.
LOCATION	
REFERENCE	
AUTHOR	Seitz, R.R.; Sagar, B.; Davis, J.D.
TYPE	govt
ORGANIZATION	Rockwell Hanford Operations. WA (USA).
TITLE	NUMERICAL MODELLING OF RADIONUCLIDE TRANSPORT THROUGH
	SEALS.
PUBLISH	Waste Management '87: Waste Isolation in the US, Technical
	Programs and Public Education. Tucson, AZ, (USA). Un
	Arizona Nuclear Engineering Dept. 1987. p. 637-644.
DATE	87/00/00
ABSTRACT	The mathematical basis of a two-dimensional model for

KEYWORDS
LOCATION
REFERENCE

transport of radionuclides through repository seals
underground nuclear waste repository is described.
MODELLING: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Bloom, S.G. (Office of Nuclear Waste Isolation, Colu
Pacific Northwest Lab. WA (USA)).
ONWI MODELS FOR SIMULATING BRINE MIGRATION IN SALT.
p. 30-31, Appendix/C.91-C.99. Proceedings of Salt Re
Project's Workshop on Brine Migration. March 1987.
87/03/00
Models based on flow due to a temperature gradient a
to a concentration gradient were presented. In the e
assessment reports, the temperature model was used t
flow rates and cumulative volume to the waste packag
estimate package failure and radionuclide release ra

KEYWORDS
LOCATION
REFERENCE

MODELLING:

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Hermann, O.W.; Parks, C.V.; Ludwig, S.B.
govt/acad
Oak Ridge National Lab. TN; Battelle Memorial Inst.,
OH. Office of Nuclear Waste Isolation.
ORIGEN-S (ALPHA,N) NEUTRON SOURCE SPECTRA IN BOROSIL
CONTAINING HIGH-LEVEL WASTE.
1987. 7 p.
87/00/00
There is growing interest in the methodology and com
software for evaluating the (alpha,n) source spectra
mixtures of high-level waste and borosilicate glass.
summary presents a significant expansion of the orig
(alpha,n) model to include alpha-interactions with t
elements of borosilicate glass.
MODELLING: glass.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Pusch, R.; Hoekmark, H.; Boergesson, L.
priv/govt
Swedish Nuclear Fuel and Waste Management Co., (Swed
OUTLINE OF MODELS OF WATER AND GAS FLOW THROUGH SMEC
BUFFERS.
June 1987. 54 p.
87/06/00
Microstructure analyses of natural clays with hydrou
smectite as major clay mineral have demonstrated tha
large variations in pore size, and that a few wide p
responsible for the great majority of the permeation
has been developed from these discoveries and is a g
for further work.
MODELLING: geology, radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Isherwood, D.; Wolery, T.
govt
Lawrence Livermore National Lab. CA (USA).
OVERVIEW OF GEOCHEMICAL MODELLING NEEDS FOR NUCLEAR

PUBLISH	MANAGMENT.
DATE	1984. 8 p.
ABSTRACT	84/00/00
KEYWORDS	MODELLING: chemistry, waste management.
LOCATION	
REFERENCE	
AUTHOR	Gutjahr, A.L.; Kincaid, C.T.; Mercer, J.W.; Murarka,
TYPE	Siegel, M.D.; Wirenga, P.J.
ORGANIZATION	govt
TITLE	Los Alamos National Lab. NM (USA).
PUBLISH	PANEL SUMMARY REPORT.
DATE	Modelling Study of Solute Transport in the Unsaturat
ABSTRACT	Workshop Proceedings. April 1987. p. 174-199.
	87/04/00
	This report summarizes the various modelling approac
	used to simulate solute transport in a variably satu
	emission. Five models are considered and conclusions
	recommendations are reported.
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Tomasko, D.; Reeves, M.; Kelly, V.A.; Pickens, J.F.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	PARAMETER SENSITIVITY AND IMPORTANCE FOR RADIONUCLID
PUBLISH	IN DOUBLE-POROSITY SYSTEMS.
DATE	1987. 37 p.
ABSTRACT	87/00/00
	A type-curve methodology using four dimensionless pa
	developed for modelling radionuclide transport throu
	fractured, double-porosity system.
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Goodwin, B.W.; Andres, T.H.; Davis, P.A.; Leneveau,
	Melniyk, T.W.; Sherman, G.R.; Wunschke, D.M. (Atomic
	Canada Ltd., Pinawa, Manitoba. Whiteshell Nuclear Re
	Establishment)
TYPE	govt
ORGANIZATION	
TITLE	POST-CLOSURE ENVIRONMENTAL ASSESSMENT FOR THE CANADI
PUBLISH	FUEL WASTE MANAGEMENT PROGRAM.
DATE	Radioact. Waste Manage. Nucl. Fuel Cycle. September
ABSTRACT	P. 241-272.
	87/09/00
	This report describes the SYVAC methodology and examp
	applications. A review of work in progress outlines
	generation of SYVAC that will be used for a formal p
	environmental assessment.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Charo, L.; Habib, P. (Ecole Polytechnique, 91-Plaise
TYPE	acad
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	POTENTIAL FOR CREATION OF A SALT DOME FOLLOWING DISP

PUBLISH	RADIOACTIVE WASTE IN A SALT LAYER. VOL.1. LABORATORY
DATE	NUMERICAL COMPUTER SIMULATIONS. (in French)
ABSTRACT	1987. 290 p.
	87/00/00
	The study aims at quantifying the possibility of cre
	salt dome from a salt layer in which heat-emitting r
	waste would be buried.
KEYWORDS	MODELLING: salt.
LOCATION	
REFERENCE	
AUTHOR	Lee, L.
TYPE	
ORGANIZATION	Du Pont de Nemours (E.I.) and Co., Aiken, SC. Savann
TITLE	PREDICTION OF WASTE GLASS MELT RATES.
PUBLISH	1987. 4 p.
DATE	87/00/00
ABSTRACT	As part of the development, a simple model was devel
	predict the melt rates for the waste glass melter.
KEYWORDS	MODELLING: glass.
LOCATION	
REFERENCE	
AUTHOR	Lee, L.M.
TYPE	priv/govt
ORGANIZATION	E.I. Du Pont de Nemours and Co. Savannah River Lab.,
TITLE	PREDICTION OF WASTE GLASS MELT RATES.
PUBLISH	Waste Management '87: Waste Isolation in the US, Tec
	Programs and Public Education. Tucson, AZ, (USA). Un
	Arizona Nuclear Engineering Dept. 1987. p. 591-594.
DATE	87/00/00
ABSTRACT	The immobilization of radioactive wastes solidifies
	by vitrification into a leach resistant borosilicate
	part of the development, a simple model was develop
	the melt rates for the waste glass melter.
KEYWORDS	MODELLING: glass, containment.
LOCATION	
REFERENCE	
AUTHOR	Greenwade, L.E.; Cederberg, G.A.
TYPE	govt
ORGANIZATION	Los Alamos National Lab. NM (USA).
TITLE	PRELIMINARY GEOCHEMICAL/GEOPHYSICAL MODEL OF YUCCA M
	(NNWSI).
PUBLISH	1987, 14 p.
DATE	87/00/00
ABSTRACT	A comprehensive model incorporates the current and r
	statigraphic, petrologic, hydrogeologic, geochemical
	material data associated with a candidate repository
	Mountain, Nevada.
KEYWORDS	MODELLING: geology, chemistry, radionuclide migratio
LOCATION	

REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Hwang, Y.; Chambre, P.L.; Lee, W.W.; Pigford, T.H.
govt
Lawrence Berkeley Lab. CA (USA).
PRESSURE-INDUCED BRINE MIGRATION IN CONSOLIDATED SALT
REPOSITORY.

PUBLISH
DATE
ABSTRACT

June 1987. 7 p.
87/06/00
This report describes a mathematical model for brine
through intact salt near a radioactive waste package
salt.

KEYWORDS
LOCATION
REFERENCE

MODELLING: radionuclide migration.

AUTHOR
TYPE
ORGANIZATION
TITLE

Jacobs, G.K., et al.
acad

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

PROCEEDINGS OF THE CONFERENCE ON THE APPLICATION OF
MODELS TO HIGH-LEVEL NUCLEAR WASTE REPOSITORY ASSESSMENT
1984. 125 p.
84/00/00

MODELLING: chemistry, disposal and storage alternatives

AUTHOR
TYPE
ORGANIZATION
TITLE

Nuclear Energy Agency. Paris (France).
PSACON LEVEL 0 INTERCOMPARISON. PROBABILISTIC SYSTEM
CODE (PSAC) USER GROUP.
Paris, France. OECD. November 1987. 114 p.

PUBLISH
DATE
ABSTRACT

87/11/00
This report describes an international code intercomparison
exercise carried out by the NEA Probabilistic System
Code user group.

KEYWORDS
LOCATION
REFERENCE

MODELLING: international.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Christensen, H.; Bjergbakke, E. (Sweden).
Bates, J.K.; Seefeldt, W.B. (eds.).
govt

DATE
ABSTRACT

Argonne National Lab. IL (USA).
RADIATION INDUCED DISSOLUTION OF UO₂.
P. 115-22. Scientific Basis for Nuclear Waste Management
Pittsburgh, PA (USA). Materials Research Society. 1987.
87/00/00
A model for the radiation induced dissolution of UO₂
developed and tested using experiments described in

KEYWORDS
LOCATION
REFERENCE

literature.
MODELLING:

AUTHOR
TYPE
ORGANIZATION

Kelmers, A.D.; Meyer, R.E.; Blencoe, J.G.; Jacobs, G.
govt
Oak Ridge National Lab. TN (USA).

TITLE	RADIONUCLIDE SORPTION METHODOLOGIES FOR PERFORMANCE A HIGH-LEVEL NUCLEAR WASTE REPOSITORIES: A PERSPECTIVE AN NRC WORKSHOP.
PUBLISH	Nuclear Safety. Oct-Dec 1987. V. 28(4) p. 515-522.
DATE	87/00/00
ABSTRACT	A workshop to discuss the characterization and model radionuclide sorption processes in rock water system to the isolation of high-level nuclear waste in geol repositories was held May 13-15, 1986. Key recommen the workshop are presented here.
KEYWORDS	MODELLING: engineering, design, policy and administr
LOCATION	
REFERENCE	
AUTHOR	Routson, C.
TYPE	govt
ORGANIZATION	DOE (USA).
TITLE	RADIONUCLIDE SORPTION ON LOW-EXCHANGE CAPACITY HANFO SOILS.
PUBLISH	DOE Report RHO-SA-157 P. May 1984. 30 p.
DATE	84/05/00
ABSTRACT	A multicomponent mass transport computer model was d assess potential migration of fission products from soils and sediments at the Hanford Site. The PERCOL employed to predict the transport of radionuclides t saturated and unsaturated sediments.
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Gee, G.W.
TYPE	priv
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	RECHARGE AT THE HANFORD SITE: STATUS REPORT.
PUBLISH	November 1987. 87 p.
DATE	87/11/00
ABSTRACT	A variety of field programs designed to evaluate rec other water balance components including precipitati infiltration, evaporation, and water storage changes carried out at the Hanford site since 1970. A determ model developed for the site, appears to be the best available for estimating recharge on a site-specific
KEYWORDS	MODELLING: groundwater.
LOCATION	
REFERENCE	
AUTHOR	Reeves, M.; Kelley, V.A.; Pickens, J.F.
TYPE	priv
ORGANIZATION	Intera Technologies, Inc. Austin, TX (USA).
TITLE	REGIONAL DOUBLE-POROSITY SOLUTE TRANSPORT IN THE CUL DOLOMITE: AN ANALYSIS OF PARAMETER SENSITIVITY AND I THE WASTE ISOLATION PILOT PLANT SITE.
PUBLISH	24 November 1987. 169 p.
DATE	87/11/24
ABSTRACT	A high transmissivity fracture-controlled path is as modelling purposes, to provide the means for transpo infinitely long-lived radionuclides through the cule to the accessible environment at the waste isolation site, following a breach which does not disturb the head potentials within the unit.
KEYWORDS	MODELLING: geology, radionuclide migration.

LOCATION
REFERENCE

AUTHOR

Randall, J.D.; Constanzi, F.A. (Waste Management Branch Engineering Safety, Office of Nuclear Regulatory Res Nuclear regulatory Commission, Washington, DC)
govt

TYPE
ORGANIZATION
TITLE

RESULTS FROM AND ISSUES RAISED BY NRC'S HIGH-LEVEL R WASTE RESEARCH PROGRAMS INTEGRATED EXPERIMENTAL, MODE MODEL VALIDATION WORK.

PUBLISH

P. 153-174. Waste Management '87: Waste Isolation in Technical Programs, and Public Education. Tucson, AZ of Arizona Nuclear Engineering Dept. 1987.

DATE

87/00/00

ABSTRACT

A major issue addressed by the program is the validity of mathematical models that will be used in predicting performance of h/w repositories. In addressing the validity of models, the program pursues several alternative lines of inquiry, given that prototypical tests of h/w repository performance can not be done.
MODELLING: geologic disposal.

KEYWORDS
LOCATION
REFERENCE

AUTHOR

Raimbault, P.

TYPE

govt

ORGANIZATION

CEA Centre D'etudes Nucleaires de Fontenay-aux-Roses

TITLE

RESULTS FROM THE METIS CODE PARTICIPATION TO THE HYD EXERCISE.

PUBLISH

April 1987. 19 p.

DATE

87/04/00

ABSTRACT

The METIS code, developed at the ENSMP, is a 2D, finite element radionuclide transport and groundwater flow model based on the hypothesis of an equivalent porous medium with an ex

KEYWORDS
LOCATION
REFERENCE

description of the main fractures. It is integrated global risk assessment code MELODIE for nuclear waste repositories in geological formations.

MODELLING: groundwater, geologic disposal, risk anal

AUTHOR

Morgan, H.S.; Wallner, M.; Munson, D.E.

TYPE

govt

ORGANIZATION

Sandia National Lab. NM; Bundesanstalt fuer Geowissenschaften und Rohstoffe, Hannover, Germany, (F.R.G.).

TITLE

RESULTS OF AN INTERNATIONAL PARALLEL CALCULATIONS EXERCISE COMPARING CREEP RESPONSES PREDICTED WITH THREE COMPUTER CODES FOR TWO EXCAVATIONS IN ROCK SALT.

PUBLISH

November 1987. 71 p.

DATE

87/11/00

ABSTRACT

Creep responses computed with the finite element code which was developed by the Federal Institute for Geosciences and Natural Resources in the Federal Republic of Germany compared to responses computed in the United States using the Sancho and Spectrum codes for two well defined boundary problems.

KEYWORDS
LOCATION
REFERENCE

MODELLING: international.

AUTHOR	Evans, Thomas J. (Wisconsin Geological and Natural H Survey)
TYPE	acad
ORGANIZATION	Wisconsin Radioactive Waste Review Board. (USA).
TITLE	REVIEW OF CANADIAN CRYSTALLINE ROCK RESEARCH PROGRAM QUARTERLEY REPORT.
PUBLISH	Wisconsin GNHS, Madison, September, 1987, 8pp.
DATE	87/09/30
ABSTRACT	The Wisconsin Radioactive Waste Review Board is monitoring the Canadian crystalline rock waste disposal. Includes a report of DOE/AECL technical conference on Groundwater Flow and Radionuclide Transport Modeling indicates that this field is still largely theoretic. At least 10 more years of field work will be required to test the models, and that current ability to predict radionuclide migration in deep fractured rock is not good.
KEYWORDS	MODELLING: hydrogeology, geology.
LOCATION	WGNHS, 3817 Mineral Point Road, Madison, WI 53705
REFERENCE	anne
AUTHOR	Geotrans, Inc. (Desert Research Institute, University of Nevada)
TYPE	govt
ORGANIZATION	Nuclear Waste Project Office, State of Nevada Agency Projects. (USA).
TITLE	REVIEW OF MODELING EFFORTS ASSOCIATED WITH YUCCA MOUNTAIN NEVADA.
PUBLISH	NWPO-TR-004-87, Carson City, September, 1988, 22pp.
DATE	88/09/00
ABSTRACT	Details five modeling investigations relating to the Nuclear Waste Storage Investigations Project. Finds quality assurance and quality control procedures are poor. Emphasizes lack of co-ordination between field investigations and overall modeling efforts. Many assumptions have been made without the appropriate field data.
KEYWORDS	MODELLING: geology.
LOCATION	Capitol Complex, Carson City, Nevada 89710
REFERENCE	anne
AUTHOR	
TYPE	acad
ORGANIZATION	Desert Research Institute, University of Nevada System
TITLE	REVIEW OF MODELLING EFFORTS ASSOCIATED WITH YUCCA MOUNTAIN NEVADA.
PUBLISH	September 1986. 22 p.
DATE	86/09/00
ABSTRACT	Detailed comments are presented on five modelling investigations related to the NNSWI at Yucca Mountain, Nevada.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	NFW 2.2-54-2
AUTHOR	Robinson, P.C.; Jackson, C.P.; Herbert, A.W.; Atkins
TYPE	Atomic Energy Authority, Theoretical Physics Division (U.K.)
ORGANIZATION	govt
TITLE	Hauptabteilung für die Sicherheit der Kernanlagen (HS) (Switzerland)/
PUBLISH	REVIEW OF THE GROUNDWATER FLOW MODELING OF THE SWISS GEWAEHR.
DATE	U.K.A.E.A, HL 86/1125, February, 1986, 31pp.
	86/02/00

ABSTRACT	Hydrogeological modeling work undertaken for Projekt reviewed, with respect to computer codes, general ap flow simulation and specific finite-element models e Several problems were identified which merit further consideration. Makes recommendations for improvemen future work.
KEYWORDS	MODELLING: hydrogeology.
LOCATION	
REFERENCE	NFW 2.2-54-1
AUTHOR	
TYPE	priv
ORGANIZATION	Fluor Technology, Inc. Irvine, CA (USA).
TITLE	ROCK MECHANICS MODELS EVALUATION REPORT. (CONTAINS G
PUBLISH	August 1987, 159 p.
DATE	87/08/00
ABSTRACT	This report documents the evaluation of the thermal

	thermomechanical models and codes for repository sub design and for design constraint analysis.
KEYWORDS	MODELLING: design, thermodynamics.
LOCATION	
REFERENCE	

AUTHOR	McTigue, D.F. (Sandia National Labs, Albuquerque, NM
TYPE	govt
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	SALT AS A POROUS THERMOELASTIC MATERIAL: LABORATORY APPLICATIONS.
PUBLISH	p. 29-30, Appendix/C.83-C.90. Proceedings of Salt Re Project's Workshop on Brine Migration. March 1987.
DATE	87/03/00
ABSTRACT	A model was developed that represents salt as a fluid porous, thermoelastic medium. The theory allows for compressibility and thermal expansion of both the po the salt.
KEYWORDS	MODELLING: salt.
LOCATION	
REFERENCE	

AUTHOR	Prindle, N.K.; Foster, J.
TYPE	priv/govt
ORGANIZATION	Technadyne Engineering Consultants, Albuquerque, NM; National Lab. NM (USA).
TITLE	SANDIA IMPLEMENTATION OF THE TRACR3D FLOW AND TRANSP NEVADA NUCLEAR WASTE STORAGE INVESTIGATIONS PROJECT.
PUBLISH	June 1987. 83 p.
DATE	87/06/00
ABSTRACT	Tracr3d is a computer code developed at Los Alamos N to model three-dimensional fluid flow and mass trans porous medium. The code is being considered for use performance assessment modelling of a potential repo high-level radioactive wastes at Yucca Mountain in N Nevada.
KEYWORDS	MODELLING: geology.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Inst. Columbus, OH. Office of Nucl Isolation.

TITLE	SECOND STATUS REPORT ON REGIONAL GROUNDWATER FLOW MO
PUBLISH	THE PALO DURO BASIN, TEXAS.
DATE	Battelle Memorial Inst. Report ONWI-604, July 1986.
ABSTRACT	86/07/00
KEYWORDS	MODELLING: groundwater.
LOCATION	
REFERENCE	

AUTHOR	
TYPE	govt
ORGANIZATION	Battelle Memorial Inst. Columbus, OH. Office of Nucl
TITLE	Isolation.
PUBLISH	SECOND STATUS REPORT ON REGIONAL AND LOCAL GROUNDWAT
DATE	MODELLING FOR RICHTON AND CYPRESS DOMES, MISSISSIPPI
ABSTRACT	Battelle Memorial Inst. ONWI-605. August 1986. 143 p
KEYWORDS	86/08/00
LOCATION	MODELLING: groundwater.
REFERENCE	

AUTHOR	Hofer, E. (Gesellschaft fuer Reaktorisicherheit (GRS
TYPE	(Germany, F.R.)); Hoffman, F.O. (Oak Ridge National
ORGANIZATION	(USA)).
TITLE	Nuclear Energy Agency. 75 - Paris (France).
PUBLISH	SELECTED EXAMPLES OF PRACTICAL APPROACHES FOR THE AS
DATE	MODEL RELIABILITY - PARAMETER UNCERTAINTY ANALYSIS.
ABSTRACT	P. 132-147. Uncertainty Analysis for Performance Ass
KEYWORDS	Radioactive Waste Disposal Systems. Proceedings of a
LOCATION	Workshop. Paris (France). Organisation for economic
REFERENCE	and Development. 1987. 258 p.
	87/00/00
	The uncertainty analysis of model predictions has to
	between two fundamentally different types of uncerta
	presence of stochastic variability (type 2 uncertain
	however, applies to deterministic as well as to prob
	model predictions and often dominates over uncertain
	1.
	MODELLING:

AUTHOR	Pin, F.G.; Oblow, E.M.
TYPE	govt
ORGANIZATION	Oak Ridge National Lab. Tn (USA).
TITLE	SENSITIVITY ANALYSIS OF PREDICTIVE MODELS WITH AN AU
PUBLISH	ADJOINT GENERATOR.
DATE	1987. 6 p.
ABSTRACT	87/00/00
KEYWORDS	The adjoint method is a well establised sensitivity
LOCATION	methodology that is particularly efficient in large
REFERENCE	modelling problems.
	MODELLING:

AUTHOR	
TYPE	acad

ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

SENSITIVITY ANALYSIS USING COMPUTER CALCULUS: A NUCLEONIC ISOLATION APPLICATION.
Nuclear Science & Engineering, 1986. V. 94. p. 46-66
86/00/00

MODELLING: risk analysis, disposal and storage alternatives

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH
DATE
ABSTRACT

Barr, G.E.; Miller, W.B.
govt
Sandia National Lab. NM (USA).
SIMPLE MODELS OF THE SATURATED ZONE AT YUCCA MOUNTAIN
July 1987. 90 p.
87/07/00
Numerical experiments examine the sensitivity of flow and
transport to uncertainties in existing data and the effects of
assumed catastrophic changes in hydraulic conductivity.
MODELLING: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Tarapore, P.S.; Gupta, R.; Clark, G.M.

TITLE
PUBLISH
DATE
ABSTRACT

Battelle Memorial Inst. Columbus, OH. Office of Nuclear
Isolation.
SIMREP 1.1: A SIMULATION MODEL FOR REPOSITORY OPERATION
June 1987. 116 p.
87/06/00

This report serves as a documentation for SIMREP 1.1, an
event computer simulation model of repository operation at a
surface waste-handling facility.
MODELLING: waste handling and emplacement.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

McConnell, D.B.; Cramer, J.J. (Atomic Energy of Canada Ltd.)
Pinawa, Man. Whiteshell Nuclear Research Establishment
B. (CEC); Chapman, N.A. (BGS).

PUBLISH

govt
Commission of the European Communities, Luxembourg.
SIMULATING THE MOVEMENT OF RADIUM AND LEAD AWAY FROM THE
LAKE URANIUM DEPOSIT,
P. 179-190. Natural Analogues in Radioactive Waste Disposal
Proceedings of a Symposium Organized by the CEC and EC
Brussels, BE, on 28-30 April 1987. London. Graham and Smith
1987. 506 p. Radioactive Waste Management Series.

DATE
ABSTRACT

87/04/00
The Cigar Lake uranium deposit in the Athabasca sandstone
formation in Northern Saskatchewan is under study as a
analogue to various aspects of nuclear fuel waste disposal.

KEYWORDS	MODELLING: geology, natural analogues.
LOCATION	
REFERENCE	
AUTHOR	Glasser, F.P.; MacPhee, D.E.; Lachowski, E.E. (Univ. Scotland).
TYPE	acad
ORGANIZATION	Argonne National Lab. Il (USA).
TITLE	SOLUBILITY MODELLING OF CEMENTS: IMPLICATIONS FOR RA WASTE IMMOBILIZATION.
PUBLISH	P. 331-341. Scientific Basis for Nuclear Waste Manag Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	The suitability of cement matrices for the long-term immobilization of radionuclides cannot be predicted short-term experimental data alone, because the chem properties of cementitious systems change continuous repository lifetime. To model such changes is comple stepwise approach has been adopted.
KEYWORDS	MODELLING: cement, containment.
LOCATION	
REFERENCE	
AUTHOR	Barry, P.J.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	STATISTICAL MODELS OF ATMOSPHERIC DISPERSION.
PUBLISH	Reprinted from Air Pollution Modeling and its Applic 211-226, 1986.
DATE	86/00/00
ABSTRACT	
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Andres, T.H. (AECL, Pinawa. Whiteshell Nuclear Resea Establishment)
TYPE	govt
ORGANIZATION	Nuclear Energy Agency. Paris (France).
TITLE	STATISTICAL SAMPLING STRATEGIES.
PUBLISH	P. 70-84. Uncertainty Analysis for Performance Asses Radioactive Waste Disposal Systems. Proceedings of a workshop. Paris, France. Organization for Economic C and Development. 1987. 258 p.
DATE	87/00/00
ABSTRACT	Systems assessment codes use mathematical models to natural and engineered systems. Probabalistic system codes carry out multiple simulations to reveal the u in values of output variables due to uncertainty in of the model parameters. In this paper, methods are for sampling sets of parameter values to be used in probabalistic systems assessment code.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Bertocci, U.; Leigh, S.; Van Orden, A.C.; Yang, G. (Bureau of Standards, Gaithersburg, MD).
TYPE	Bates, J.K.; Seefeldt, W.B. (eds.).
ORGANIZATION	govt Argonne National Lab. Il (USA).

TITLE	STATISTICS OF PIT INITIATION: ANALYSIS OF CURRENT TR
PUBLISH	DURING PASSIVE FILM BREAKDOWN.
DATE	P. 251-259. Scientific Basis for Nuclear Waste Manag
ABSTRACT	Pittsburgh, PA (USA). Materials Research Society. 19 87/00/00
	During the incubation period preceding pitting, curr fluctuations indicate the beginning of the breakdown passive film. The characteristics of these current t are being examined as a possible way to predict pitt Stochastic models applied to the breakdown process h proposed, and in order to test how well they account experimental results, various forms of processing of vs. time records are necessary. This paper describes experimental data-taking methods, the processing rou developed for the statistical analysis of the data, the experimental results with computer simulations b stochastic model.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Howorth, J.M.
TYPE	
ORGANIZATION	UKAEA Harwell Lab. Environmental and Medical Science
TITLE	Department of the Environment, London (UK). STUDIES OF ENVIRONMENTAL RADIOACTIVITY IN CUMBRIA, P MODELLING OF THE SEA-TO-LAND TRANSFER OF RADIONUCLID ASSESSMENT OF THE RADIOLOGICAL CONSEQUENCES. FINAL R
PUBLISH	December 1987. 140 p.
DATE	87/12/00
ABSTRACT	A mathematical model is described which represents t sea-to-land transfer of actinides discharged into th from the Sellafield reprocessing plant. The model su reproduces the marine distribution of plutonium and the Irish Sea between Cumbria and the Isle of Man an the magnitude of the transfer process to land.
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Reeves, M.; Ward, D.S.; Davis, P.A.; Banano, E.J.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA); Nuclear Regulatory Co
TITLE	Washington, DC (USA). SWIFT (SANDIA WASTE ISOLATION FLOW AND TRANSPORT) II SELF-TEACHING CURRICULUM: ILLUSTRATIVE PROBLEMS FOR WASTE-ISOLATION FLOW AND TRANSPORT MODEL FOR FRACTUR
PUBLISH	Jan 1987. 106 p.
DATE	87/01/00
ABSTRACT	Several documents have been written describing Swift current version of the SWIFT (Sandia Waste Isolation Transport) Code. This document is devoted to assisti analyst who desires to use the Swift II code.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Oren, T.I.; Elzas, M.S.
TYPE	acad
ORGANIZATION	University of Ottawa. (Canada).
TITLE	TECHNICAL FOUNDATIONS FOR QUALITY ASSURANCE OF SYSTE

PUBLISH	ENGINEERING ACTIVITIES FOR SAFETY ASSESSMENT. Waste Management '87: Waste Isolation in the US, Tec Programs and Public Education. Tucson, AZ, (USA). Un Arizona Nuclear Engineering Dept. 1987. p. 275-282.
DATE	87/00/00
ABSTRACT	Basic system design axioms and a framework for design derivation based on structural design are presented. quality assurance issues are elaborated on.
KEYWORDS	MODELLING: safety analysis.
LOCATION	
REFERENCE	
AUTHOR	Bath, A.H.; Cave, M.; Berner, U.; McKindley, I.G.; N Come, B. (CEC); Chapman, N.A. (BGS).
TYPE	
ORGANIZATION	Commission of the European Communities, Luxembourg.
TITLE	TESTING GEOCHEMICAL MODELS IN A HYPERALKALINE ENVIRO
PUBLISH	P. 167-178. Natural Analogues in Radioactive Waste D Proceedings of a Symposium Organized by the CEC and Brussels, BE, on 28-30 April 1987. London. Graham an 1987. 506 p. Radioactive Waste Management Series.
DATE	87/04/00
ABSTRACT	The near-field of a nuclear waste repository contain volumes of concrete and cement will be highly alkali probably, chemically reducing. A challenge in safety to determine the constraints on releases of particul radionuclides set by their low solubility in such an environment.
KEYWORDS	MODELLING: chemistry, geology, safety analysis.
LOCATION	
REFERENCE	
AUTHOR	Liebetrau, A.M.
TYPE	
ORGANIZATION	Pacific Northwest Lab. WA (USA).
TITLE	THE ADAPTION AND USE OF RESEARCH CODES FOR PERFORMAN ASSESSMENT.
PUBLISH	May 1987. 17 p.
DATE	87/05/00
ABSTRACT	Models of real-world phenomena are developed for man The models are usually implemented in the form of a code.
KEYWORDS	MODELLING:
LOCATION	
REFERENCE	
AUTHOR	Harvey, K.B.; Litke, C.D.; Boase, C.A.
TYPE	govt
ORGANIZATION	Atomic Energy of Canada Limited.
TITLE	THE DISSOLUTION OF A SIMPLE GLASS. PART 1. INITIAL M APPLICATION TO AN OPEN GLASS/WATER SYSTEM.
PUBLISH	7 . (1986). Reprinted from Physics and Chemistry of (1986) 27(1):15-21.
DATE	86/00/00
ABSTRACT	
KEYWORDS	MODELLING: glass, dissolution.
LOCATION	
REFERENCE	
AUTHOR	Tomasko, D.
TYPE	govt

ORGANIZATION TITLE	Sandia National Lab. NM (USA). THE EFFECTS OF A BIMODAL PORE DISTRIBUTION ON MATRI A FRACTURED POROUS MEDIUM.
PUBLISH DATE ABSTRACT	August 1987. 28 p. 87/08/00 Three models are developed for predicting the conce conservative (nonreactive) solute during transport t fractured porous medium consisting of two materials different physical properties.
KEYWORDS LOCATION REFERENCE	MODELLING: fractures.
AUTHOR TYPE ORGANIZATION TITLE	Cherrill, T.P.; Herbert, A.W.; Jackson, C.P. govt UKAEA Atomic Energy Research Establishment, Harwell. THE EXTENSION OF NAMSOL TO MODEL THE EFFECT OF ROCK- DIFFUSION.
PUBLISH DATE ABSTRACT	Feb 1987. 56 p. 87/02/00 The process of rock-matrix diffusion is briefly disc implementation of an efficient and flexible finite-e of it in NAMSOL is described.
KEYWORDS LOCATION	MODELLING: geology.
REFERENCE	
AUTHOR	Liebetrau, A.M.; Doctor, P.G. (Pacific Northwest Lab , WA (USA)).
TYPE	priv
ORGANIZATION	Nuclear Energy Agency. 75 - Paris (France).
TITLE	THE GENERATION OF DEPENDENT INPUT VARIABLES TO A PER ASSESSMENT SIMULATION CODE.
PUBLISH	P. 85-114. Uncertainty Analysis for Performance Asse Radioactive Waste Disposal Systems. Proceedings of a workshop. Paris, France. Organization for Economic C and Development. 1987. 258 p.
DATE	87/00/00
ABSTRACT	Mathematical models are being developed in many coun in the assessment of risks associated with the deep disposal of high-level nuclear wastes. The models ar to simulate one or more steps in the following scena containment is lost, and the radionuclides are relea repository, are transported to the biosphere, and be accessible to man.
KEYWORDS LOCATION REFERENCE	MODELLING: radionuclide migration.
AUTHOR TYPE ORGANIZATION TITLE	Nuclear Energy Agency. 75-Paris, (FR). THE INTERNATIONAL HYDROCOIN PROJECT. GROUNDWATER HYD MODELLING STRATEGIES FOR PERFORMANCE ASSESSMENT OF NU DISPOSAL.
PUBLISH DATE ABSTRACT	1987. 25 p. 87/00/00 Hydrocoin is concerned with the assessment of ground movements at potential nuclear waste disposal sites help of mathematical models and computer codes.
KEYWORDS	MODELLING: groundwater.

LOCATION
REFERENCE

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS
LOCATION

Banba, T.; Murakami, H. (Japan Atomic Energy Research
Dept. of Environmental Safety Research, Tokai, Ibaraki
govt

THE LEACHING BEHAVIOR OF A GLASS WASTE FORM- PART 3:
MATHEMATICAL LEACHING MODEL.

Nucl. Technol. January 1987.V.76(1) p.84-90.
87/01/00

The one-dimensional diffusion model of leaching was
the basis of the soxhlet-type leaching experiment of
glass.

MODELLING: glass, leaching.

REFERENCE

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Labreche, D.A.; Petney, S.V.

priv/govt

RE/SPEC Inc.; Sandia National Lab. NM (USA).

THE SPECTROM-31 COMPLIANT JOINT MODEL: A PRELIMINARY
AND FEASIBILITY STUDY: NNWSI.

June 1987. 75 p.

87/06/00

The compliant joint, a deformable continuum joint model
incorporated into the two-dimensional finite-element
program spectrom-31.

MODELLING:

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Sherman, G.R.; Donahue, D.C.; King, S.G.; So, A.

govt

THE SYSTEMS VARIABILITY ANALYSIS CODE SYVAC2 AND SUB
THE SECOND INTERIM ASSESSMENT OF THE CANADIAN CONCEPT
NUCLEAR FUEL WASTE DISPOSAL.

Atomic Energy of Canada Ltd. Report TR-317. October
86/10/00

MODELLING:

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE

ABSTRACT

KEYWORDS
LOCATION
REFERENCE

Sharland, S.M. (Harwell Lab., Oxon, England).

Bates, J.K.; Seefeldt, W.B. (eds.).

priv

Argonne National Lab. IL (USA).

THEORETICAL EVALUATION OF LOCALIZED CORROSION IN RAD
WASTE CANISTERS.

P. 283-293. Scientific Basis for Nuclear Waste Management
Pittsburgh, PA (USA). Materials Research Society. 19

87/00/00

In this paper, they discuss several techniques of model
term pit propagation in waste canisters. The complex
problem has led to a number of physical and chemical
approximations in the modelling.

MODELLING: corrosion, containment.

AUTHOR
TYPE
ORGANIZATION
TITLE
PUBLISH

Van Sambeek, L.L.; Stormont, J.C.
priv
RE/SPEC Inc. NM (USA).
THERMAL/STRUCTURAL MODELLING OF TEST SERIS A OF THE
SEAL PERFORMANCE TESTS.
Aug. 1987. 60 p.

DATE
ABSTRACT

87/08/00
In this report, various modelling efforts concernin
long-term sealing of nuclear waste are described an
Some results are compared to an in situ test on con
in host rock salt at WIPP. The report concludes by
present thermal/structural modelling capabilities a
limitations, and the direction future development e
take.

KEYWORDS
LOCATION
REFERENCE

MODELLING: geologic disposal.

AUTHOR
TYPE
ORGANIZATION
TITLE

Jantzen, C.M.; Plodinec, M.J.
acad

PUBLISH
DATE
ABSTRACT
KEYWORDS
LOCATION
REFERENCE

THERMODYNAMIC MODEL OF NATURAL, MEDIEVAL AND NUCLEAR
DURABILITY.
Journal of Non-Crystalline Solids 67: 207-223.
84/00/00

MODELLING: thermodynamics, glass.

AUTHOR
TYPE
ORGANIZATION
TITLE

St John, C.M.
priv/govt
Sandia National Labs. NM (USA).; Afbabian Assoc., CA
THERMOMECHANICAL ANALYSIS OF UNDERGROUND EXCAVATIONS
VICINITY OF A NUCLEAR WASTE ISOLATION PANEL.
June 1987. 81 p.

PUBLISH
DATE
ABSTRACT

87/06/00
This report summarizes the results of a series of ar
excavations in the vicinity of waste emplacement pan
numerical modelling procedures were used in this stu
MODELLING: geologic disposal.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Pruess, K.

TITLE
PUBLISH
DATE
ABSTRACT

Lawrence Berkeley Lab. CA; Nuclear Regulatory Commis
Washington, DC. Div. of Waste Management.
TOUGH USERS GUIDE.
August 1987. 85 p.
87/08/00

This document contains a technical description of th
computer program, which was developed for simulating
transport of water, vapour, air, and heat in porous
fractured media.
MODELLING: geology.

KEYWORDS
LOCATION
REFERENCE

AUTHOR	Dykhuizen, R.C.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	TRANSPORT OF SOLUTES THROUGH UNSATURATED FRACTURED M
PUBLISH	Water Res. Dec. 1987. V. 21(12) p. 1531-1539.
DATE	87/12/00
ABSTRACT	A numerical model is presented to represent the tran
KEYWORDS	solutes through a highly fractured, unsaturated poro
LOCATION	MODELLING: radionuclide migration.
REFERENCE	

AUTHOR	Cederberg, G.A.; Greenwade, L.E.; Travis, B.J. (Los
	National Lab., NM).
	Bates, J.K.; Seefeldt, W.B. (eds.).
TYPE	govt
ORGANIZATION	Argonne National Lab. IL (USA).
TITLE	TRANSPORT OF URANIUM AND TECHNETIUM THROUGH THE UNSA
	TUFFS, YUCCA MOUNTAIN, NEVADA.
PUBLISH	P. 703-712. Scientific Basis for Nuclear Waste Manag
	Pittsburgh, PA (USA). Materials Research Society. 19
DATE	87/00/00
ABSTRACT	An area containing unsaturated fractured tuffs at Yu
	Nevada, is one of the potential sites for geologic s
	high-level radioactive waste. The Environmental Prot
	Agency (EPA) 40 CFR 191 regulation limits the cumula
	releases of many radionuclides from the repository t
	accessible environment for 10 000 years after dispos
	Numerical models can be used to determine if the EPA
	requirement is met. In this paper a preliminary set
	calculations for uranium and technetium is discussed
KEYWORDS	MODELLING: radionuclide migration, tuff.
LOCATION	
REFERENCE	

AUTHOR	Santschi, P.H.; Hoehn, E.; Lueck, A.; Farrenkothen,
	Federal Institute for Water Resources and Water Poll
	Control, Duebendorf).
TYPE	govt
ORGANIZATION	
TITLE	TRITIUM AS A TRACER FOR THE MOVEMENT OF SURFACE WATE
	GROUNDWATER IN THE GLATT VALLEY, SWITZERLAND.
PUBLISH	Environ. Sci. Technol. September 1987. V. 21(9) P. 9
DATE	87/09/00
ABSTRACT	In spite of the complex hydrogeology of the lower Gl
	tritium breakthrough curves could be effectively sim
	modelling approaches developed from an experimental
KEYWORDS	MODELLING: groundwater.
LOCATION	
REFERENCE	

AUTHOR	Travis, B.J.; Nuttall, H.E.
--------	-----------------------------

TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

AUTHOR

TYPE
ORGANIZATION
TITLE

PUBLISH

DATE
ABSTRACT

KEYWORDS
LOCATION
REFERENCE

govt
Los Alamos National Lab. NM (USA).
TWO-DIMENSIONAL NUMERICAL SIMULATION OF GEOCHEMICAL
YUCCA MOUNTAIN. (NNWSI)
December 1987. 69 p.
87/12/00

Several physical and chemical processes can affect
radionuclides in Yucca Mountain. Geometric spreading
flow will reduce the concentration of contaminated
reaching the accessible environment.
MODELLING: radionuclide migration.

Hooker, P.J.; Chapman, N.A. (British Geological Survey
UK. Fluid Processes Research Group) (eds.)

Department of the Environment. London (UK).
UK NATURAL ANALOGUE CO-ORDINATING GROUP, 1ST ANNUAL
REPORT.

November 1987. 40 p.
87/11/00

The UK Natural Analogue Co-ordinating Group's function
ensure that the different research projects have an
purpose aimed at improving and applying our understanding
natural geochemical processes in a way that will increase
confidence in long-term modelling predictions. Improved
modelling prediction of radionuclide transport in the
will directly benefit the performance and safety of
proposed radioactive waste repositories.
MODELLING: policy and administration.

Case, M.J.; Ritter, P.D. (Idaho National Engineering
G Idaho, Inc., Idaho Falls (USA)).
govt

USE OF SYSTEMS ANALYSIS TECHNIQUES IN THE EGANDG
MANAGEMENT ENVIRONMENTAL SURVEILLANCE PROGRAM.

P. 357-362. Waste Management '87: Waste Isolation
Technical Programs, and Public Education. Tucson, AZ
Arizona Nuclear Engineering Dept. 1987.

87/00/00

The environmental surveillance program of Eg and G
has successfully implemented a systems analysis approach
simulation models to supplement its monitoring program
radioactive waste management complex.

MODELLING: monitoring, waste management.

AUTHOR
TYPE
ORGANIZATION
TITLE

PUBLISH
DATE
ABSTRACT

Ensminger, D.A.; Koplik, C.M.; Nalbandian, J.Y.

Analytic Sciences Corp. Reading, MA, (USA).
USER'S GUIDE TO MARINRAD IV (MARINE RADIONUCLIDE TRANSPORT
DOSE): MODEL FOR ASSESSING THE CONSEQUENCES OF RELEASE
RADIOACTIVE MATERIAL INTO THE OCEANS.

September 1987. 164 p.
87/09/00

Marinrad IV (Marine Radionuclide Transport and Dose)

KEYWORDS	of three Fortran'77 computer programs designed to ev
LOCATION	consequences of the release of radionuclides into th
REFERENCE	MODELLING: marine disposal, radionuclide migration.
AUTHOR	Longsine, D.E.; Bonano, E.J.; Harlan, C.P.
TYPE	govt
ORGANIZATION	Sandia National Lab. NM (USA).
TITLE	USER'S MANUAL FOR THE NEFTRAN COMPUTER CODE. (CONTAI
PUBLISH	September 1987, 161 p.
DATE	87/09/00
ABSTRACT	This document describes the NEFTRAN (Network Flow an computer code and provides the reader with enough de information to use this code. NEFTRAN was developed assessment of ground-water flow and radionuclide tra high-level radioactive waste repositories mined in d saturated and fractured geologic formations.
KEYWORDS	MODELLING: groundwater, radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	Nykri, Mikko (Finland).
TYPE	
ORGANIZATION	
TITLE	VALIDATION OF A NUMERICAL RELEASE MODEL (REPCOM) FOR REACTOR WASTE DISPOSAL SYSTEMS: PT.1. START-UP OF TH EXPERIMENTS.
PUBLISH	May 1987. 91 p.
DATE	87/05/00
ABSTRACT	The aim of the work is to model experimentally the i structures and materials of two reactor waste reposi to use the results for the validation work of a nume field release model, REPCOM. The experimental modell multibarrier systems is conducted on a laboratory sc the same principal materials as are employed in the reactor waste disposal concepts. The migration of ra is studied in two or more consecutive material layer
KEYWORDS	MODELLING: radionuclide migration.
LOCATION	
REFERENCE	
AUTHOR	
TYPE	acad
ORGANIZATION	
TITLE	VALIDATION OF HYDROGEOLOGIC MODELS TO DESCRIBE GROUND IN THE CRYSTALLINE BASEMENT OF NORTHERN SWITZERLAND.
PUBLISH	Nuclear Waste Management Symposium. Stockholm (Swede 9-11, 1985. p. 107.
DATE	85/09/00
ABSTRACT	
KEYWORDS	MODELLING: hydrogeology, groundwater.
LOCATION	
REFERENCE	
AUTHOR	Laurens, J.M.
TYPE	priv/govt
ORGANIZATION	Electrowatt Engineering Services, Ltd., (UK).; Depar Environment. London (UK).
TITLE	VALIDATION OF THE VAULT COMPUTER MODEL 'VERMIN' FOR BEHAVIOR OF REPOSITORIES IN GEOLOGICAL FORMATIONS.

PUBLISH
DATE
ABSTRACT

Oct. 1987. 216 p.

87/10/00

A validation methodology is proposed and applied to model VERMIN, which is used to simulate radionuclide from repositories for solid radioactive wastes.

MODELLING: radionuclide migration.

KEYWORDS
LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION

Read, D.; Broyd, T.W. (Atkins Research and Develop

Technische Univ. Muenchen, Garching, Germany, F.R. Radiochemie; Commission of the European Communities (Belgium).

TITLE

VERIFICATION AND VALIDATION OF PREDICTIVE COMPUTER DESCRIBING THE NEAR AND FAR FIELD CHEMISTRY OF RADIO DISPOSAL SYSTEMS.

PUBLISH

P. 97-98. Chemistry and Migration Behavior of Actin Fission Products in the Geosphere. Abstracts. 1987.

DATE

87/00/00

ABSTRACT

Published in summary form only.

KEYWORDS

MODELLING: chemistry, radionuclide migration.

LOCATION
REFERENCE

AUTHOR
TYPE
ORGANIZATION
TITLE

Tylock, B.; Jansen, G.; Raines, G.

govt

Office of Nuclear Waste Isolation. (USA).

VERIFICATION OF THE 2.00 WAPPA-B (WASTE PACKAGE PERFORMANCE ASSESSMENT-B VERSION) CODE.

PUBLISH

July 1987. 71 p.

DATE

87/07/00

ABSTRACT

A modified code, WAPPA-B, is used for the computation

KEYWORDS
LOCATION
REFERENCE

failure due to uniform corrosion.

MODELLING:

AUTHOR
TYPE
ORGANIZATION

Tarapore, P.S.

Battelle Memorial Inst. Columbus, OH. Office of Nuclear Isolation.

TITLE

VERIFICATION REPORT FOR SIMREP 1.1.

PUBLISH

June 1987. 50 p.

DATE

87/06/00

ABSTRACT

SIMREP 1.1 is a discrete event computer simulation of operations in the surface waste-handling facility.

KEYWORDS
LOCATION
REFERENCE

MODELLING: waste handling and emplacement.

